



STANDARD OF RESPONSE COVER



<http://www.ci.fayetteville.nc.us/>

April, 2011



Dale Iman, City Manager

Fire Chief, Benjamin E. Nichols

Michael Hill, Accreditation Manager

Accreditation Team Members:

Assistant Chief Ben Major

Captain Roy N. West

Lieutenant Lester Goodwin

Lieutenant Johnathan Tatum



April 8, 2011

Introduction

This section provides an orientation to the Standard of Cover process and the methodology used to determine appropriate response times, the number of personnel required to bring the incident under control, and the overall risk assessment of the City.

The Fayetteville Fire/Emergency Management Department (FFD) provides an array of public safety services for the citizens of Fayetteville. The department consists of sixteen strategically located fire stations that are staffed with personnel 24 hours a day. The three hundred thirty personnel that are a part of this department are dedicated to providing the most effective and professional services possible. It is because of this desire to be a leader in the fire service that the development of the department's first Standard of Response Cover was created. For years, departments in the fire service have struggled with determining the appropriate number of personnel and necessary equipment to adequately accomplish emergency response objectives emergency incidents. There have been many attempts to create a standard methodology for determining the necessary resources a community needs to ensure that citizens and their property are adequately protected. The unique characteristics of each individual community have defied efforts to create a one size fits all solution to community risks. The FFD has taken the position that one community's emergency and non-emergency risks cannot be compared to another. Any standard solution or methodologies must be specific to each jurisdiction and cannot be overlaid onto other areas within the community.

Identifying a process to assess the overall level of service for the FFD has been made possible by a joint effort between the International Association of Fire Chiefs and the International Association of City Managers. A forum of these two groups now known as the Commission on Fire Accreditation International, resulted in the creation of a formal, extensive self-assessment and Accreditation process.



The National Fire Protection Association (NFPA) and the Insurance Services Office (ISO) are also two of the many agencies that have attempted to create standards related to the measurement of fire and emergency services performance capabilities. In 2010, ISO released a revision to its rating schedule that mirrors many of the components of CFAI's Accreditation process. The Accreditation process includes 10 categories with major elements of responding to 258 performance indicators, 82 of which are considered "core competencies" which must be met in order to achieve accredited status.

The Standard of Response Coverage is defined as the written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile resources of the department in order to respond to an all risk environment. The overall assessment evaluates the department's ability to provide adequate resources to respond to an "all-risk" environment including fire based incidents as well as non-fire incidents such as EMS, Hazmat, Technical Rescue, as well as natural and manmade disasters, confined space, and trench rescues.

The Fayetteville Fire/Emergency Management Department's Standard of Response Coverage was developed through an extensive evaluation of the department's current practices, goals, objectives, historical response data and community risk assessment. The results of this analysis were then translated into the level of service that the department could be expected to deliver. Level of Service is defined as the resources needed to meet stated service level objectives. Level of Service is defined only in terms of what is provided, not in terms of effectiveness or quality. Creating a level of service consists of analyzing the distribution and concentration of resources in relation to the potential demand placed upon those resources by the level of risk involved.



The four major components of the Standard of Response Cover Document include:

Component A: A Description of the community served.

Component B: A review of the services provide with existing deployment and baseline performance.

Component C: A review of the community expectations.

Component D: A review of the community risks.

The self assessment process requires the department to complete a Standard of Response Cover study that identifies two essential areas of performance measurement and capabilities:

- Determine the appropriate response time and number of personnel needed to mitigate the effects of emergencies (structure fires, medical emergencies, hazardous materials incidents, rescues, and floods etc.)
- Conduct a survey of the fire risks for all structures in the City.

This assessment study is a systematic approach to addressing our deployment issues. Many factors are measured to create a comprehensive systems approach to analyzing deployment in order to thoroughly assess if a department pursuing Accreditation has enough resources properly deployed to meet their community's risks and expectations. This system includes a critical self analysis of historical data, existing and proposed deployment strategies, distribution and concentration of resources based on response time criteria, identification of community risks and expectations, and the reliability of responses. It also provides a method of continuous evaluation for overall department improvements. A variety of risk assessment tools must be utilized instead of just deploying resources with the intention of yielding an effective outcome. This process of resource deployment would not provide sufficient resources to critical incidents.



Often when a public official, elected or appointed, discusses their community's fire service capability, they assume that their fire department has the resources to handle any emergency incident that may happen within their city. Utilizing this systematic approach of self assessment and deployment analysis results in an informed public policy debate where City Council can adopt and purchase the necessary resources for community protection based on facts. The Standards of Response Coverage is an actual continuous process that defines the **distribution** and **concentration** of fixed and mobile resources within the jurisdiction. The Standards of Response Cover contains everything a fire department needs to determine resource deployment.

Through this comprehensive approach, the Fayetteville Fire/Emergency Management Department has been able to match local needs (risk and expectations) with the cost of various levels of service. An emergency event will continue to escalate if resources arrive late, are insufficiently equipped, or under staffed. Any incident that is allowed to escalate through insufficient resources will draw down the community's available resources and possibly any other jurisdiction's resources that are used for automatic and mutual aid. What emergency response companies must do in order to save lives and limit property damage, is to arrive within a reasonable amount of time with sufficient resources to complete the critical tasks safely.

To contain a fire to its area of origin, the arrival of the first Fire Company and subsequent fire resources must be on scene prior to a fire reaching the Flashover stage (This term is further defined below). The success of preventing Flashover is based on the geographic distribution of resources and the concentration of resources to meet the potential risks. The distribution and concentration of resources is not entirely for fire related incidents but also includes medical, rescue, and hazardous material associated incidents. For example, most medical emergencies primarily require a single fire unit response, while a multiple vehicle incident requires a response from additional resources to provide the critical tasks necessary for incident control and mitigation.



The response to areas with a high life hazard potential, high economic value, or high GPM fire flows require the timely arrival of multiple fire companies to control and extinguish fires. The Fayetteville Fire/Emergency Management Departments Standard of Response Cover document covers the required distribution and concentration of resources as well as determines the associated risks and current fire resources based on historical call volume and assessments.

In creating the SOC document, decisions were made regarding the placement of apparatus, personnel, and stations in relation to the potential demand for service by risks as well as historical response demands. Risks are identified and evaluated by completing risk assessment surveys of occupancies located in each respective response district. By understanding where and what the community risks are, an organization can then match resource locations with the identified risks to maximize its response effectiveness to emergency incidents, efficiently and safely. Additional tools were utilized to develop the plan and support the findings during its development. These tools includes historical response data from Firehouse records management system, Risk Assessment Surveys, GIS plotting of historical response data, FFD policies and procedures, Cumberland County GIS and census information, and FFD Benchmark evolutions. This document was created utilizing readily available formats via the internet, specifically the San Diego, CA Fire Department, the Seattle, WA Fire Department, Corte Madera, CA Fire Department, and the Rocky Mount, NC Fire Department, which assisted the department in the development of this document.



Table of Contents

Introduction	3
Executive Summary	10
Community Served.....	12
Legal Basis	12
History of the Agency	13
Service Milestones	14
Funding Sources.....	15
Area Description	
Topography	16
Climate	16
Population.....	17
Disaster Potential.....	22
Area Development.....	23
Services Provided	
Fire Suppression.....	33
Rescue	35
Medical.....	36
Hazardous Materials.....	37
Special Services.....	37
Current Deployment	41
Community Expectations and Performance Goals	150
Community Risk Assessments and Risk Levels.....	165
Methodology	165
Planning Areas/Zones.....	177
Fire Suppression Services.....	193
Emergency Medical Services	209
Hazardous Materials Services	220
Rescue Services	231



Fayetteville Fire/Emergency Management

Standard of Coverage

Historical Perspective and System Performance	237
Performance Objectives and Measures	259
Compliance Methodology	300
Overall Evaluation	303
Appendix	305



Executive Summary

The Fayetteville Fire/Emergency Management Department (FFD) has a long and proud history of quality service to the citizens of our community. Since its charter by the North Carolina Legislature in 1791, the Department has built a reputation for diligence and progressive leadership in fire services, a reputation which continues to be demonstrated by local, state, and national recognition. The Department's long-term objectives are centered on providing excellent and professional services to all of the citizens of Fayetteville. We strive to be a leader in public safety services by providing highly trained and properly equipped personnel. The Fayetteville Fire/Emergency Management Department continues to mold and shape our services to meet the changing needs of our community. The Department is accountable to our community for the highest quality public safety services, including emergency response, emergency prevention and community education.

Accreditation has multiple benefits for the individual agencies and the jurisdiction it is legally created by. It promotes excellence, quality improvement, assurance to peer groups, citizens and community, internal and external audits and evaluations, identification of strengths and weaknesses, professionalism for the department firefighters and staff, the communication of management philosophy, Core Values, coordination of all strategic plans and specific plans and the fostering of organizational pride for the entire spectrum of the departments involvement. The cornerstone of this foundation is the self-assessment and performance evaluation to increase the efficiency and effectiveness of the Fayetteville Fire/Emergency Management Department. It becomes a measure of true attainment of performance goals and to insure true value is added to the people we serve daily. The Accreditation process is valuable when adjusting to change and growth, establishing effectiveness, making leadership changes, and when increased professionalism is needed to bring the entire organization to a higher level of performance.



Mission Statement

The Fayetteville Fire/Emergency Management Department is committed to the preservation of life, property, and the environment in our community through effective public education, fire code enforcement, and emergency response.

We are dedicated to achieving customer satisfaction while serving with R.E.S.P.E.C.T.

Core Values

Responsibility –

We will accept our responsibilities and promote personal accountability.

Ethics –

We will operate honestly and promote transparency of government.

Stewardship –

We will operate in a cost-efficient manner and promote fiscal maturity.

Professionalism --

We will operate with “best-practices” in mind and promote competence.

Entrepreneurial Spirit –

We will operate innovatively and promote creativity.

Commitment -

We will operate with an understanding of stake holder’s needs and promote loyalty.

Teamwork -

We will operate as a group and promote cooperation.

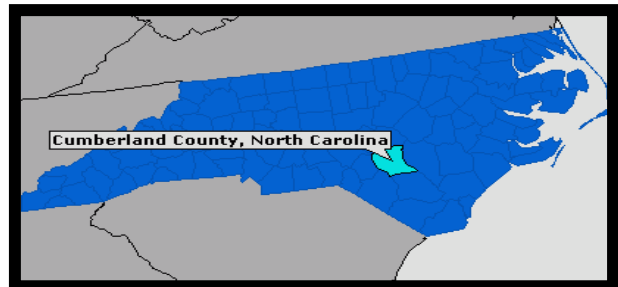


Component A: Community Served

Legal Basis

The City of Fayetteville is located in the western most portion of the Coastal region of North Carolina. The city was established in 1762 and has experienced continued growth over the years. The City of Fayetteville has been legally chartered by the State of North Carolina as a local municipality. Under the charter it has all of the powers, duties, rights, privileges, and immunities conferred and imposed on cities by the general law of North Carolina. The City Charter establishes that the City of Fayetteville operates under the council-manager plan as provided in G.S. 160.147 et. seq. It also defines the roles and responsibilities of the City Manager and the Fire Chief. The Fire Chief is directly responsible for the administration of the Fayetteville Fire/Emergency Management Department.

Fayetteville is located in Cumberland County which is bordered by Bladen, Sampson, Harnett, Moore, Hoke, and Robeson Counties. Fayetteville is the sixth largest city in North Carolina and the largest metropolitan area in the southeast region of our state. Fort Bragg which is the largest military installation in the world also connects with Fayetteville. Fort Bragg has a population of over fifty thousand soldiers and civilians that frequent the city on a daily basis.





History of the Agency

The Fayetteville Fire/Emergency Management Department was first organized in 1791. Under North Carolina General Statutes 159, the department was established to provide fire protection for the City of Fayetteville and has done so now for over two hundred years. The department has seen continued growth in its development. Following a great fire that nearly wiped the City of Fayetteville off the map, the department began to transition from fire brigades carrying leather buckets to purchasing its first hand powered steam engine. By 1908, the department had grown to thirty volunteers and saw the opening of Central Fire Station. This was the first true fire station



for the department. Through the years, the department would continue to grow and replace the hand and horse operated equipment with more modern motorized equipment. In 1941, the department opened its second station atop Haymount Hill which is today the departments' oldest operating fire station. In 1947, the

department began making the transition to a career department with both stations being staffed 24 hours a day. The department would continue to grow over the years, adding more stations and adding on a third shift in 1974. The department had grown to 156 personnel by this time. During the late eighty's and early ninety's, the department added on a second battalion and a Haz-Mat team that today provides assistance throughout the state as a part of our states Regional Response Team. The department has also established other specialized teams such as the Collapse Search and Rescue (CSAR) team that covers incidents such as trench rescue, confined space rescue, structural collapse, and land search rescue.



Service Milestones

Over the course of the last decade, the department has seen exponential growth that has allowed us to become one of the largest fire departments in the state. Through things such as controlled annexations, economic, and governmental growth, the department continues to increase in size. In 2002, the department achieved a milestone



that few other departments in North Carolina have been able to achieve. The department received an ISO rating of "Class 2" from the Insurance Services Office. The department was able to maintain this rating following its 2008 inspection. In 2004, the department added a 3rd battalion of firefighters and equipment following an annexation which brought in an additional 40,000 citizens.

As a direct result of the annexations, the department added two additional stations to the department. These stations which were once operated with mostly volunteers are now fully staffed and operated with FFD personnel. Three additional stations (14, 15, and 19) have been constructed so as to improve response times and provide coverage to the citizens of Fayetteville. As of January 2011, the department consists of 330 uniformed firefighters throughout the city located in 16 fire stations. There are plans for one new fire station to be built to accommodate Engine 16 which is currently responding to incidents from Station 1. There are also plans to have stations 4 and 12 relocated to improve response times and better serve our citizens. The department is currently led by Fire Chief Benjamin Nichols who has been serving as Fire Chief since 2004.

The department has also effectively implemented a program for the replacement of its aging apparatus fleet. Since 2005, the department has taken an assertive effort to update and/or replace its aging apparatus fleet. With the development of a fleet replacement plan, the department has purchased nine new engines, three ladder trucks, one heavy rescue truck, and several other smaller vehicles over the last five years. In



addition to the replacement of our aging apparatus, the department has also been working towards providing personnel with advanced technologies for the purpose of safety and efficiency while operating at emergency incidents.

Each frontline apparatus is equipped with a Mobile Computer Terminal (MCT) that provides personnel with vital incident response information while responding to emergencies such as incident location, CAD notes, and responding unit information. The MCT's also allow us to control our responses times with remote response action capabilities from the units. The capabilities for identifying the quickest routes to specific locations are also available. Personnel can also access risk assessment records that are documented in our Firehouse RMS that provide valuable information such as building construction type, fire flow requirements, owner contact information, hydrant locations, and hazards to personnel. While the milestones that are listed here are some of the more significant ones, there have also been others that have made an impact on the department and the public. The following are other significant achievements in our department.

2009: Fire Prevention Division reinstated the Plans Review Process

2010: Implementation of the Health and Wellness Program

2011: Construction of our new Fire Training Tower

Funding Sources

The department operates on an annual budget of over \$23 million dollars. The budget is generated on income divided from taxes generated on an annual basis. Through the submission of an annual budget to the City Manager's office, and the projected revenues for the City of Fayetteville, the budget document is approved and implemented each fiscal year on July 1st. The department also applies for grants in addition to other funding sources as they become available. In 2009, the department received a grant



through the Staffing for Adequate Fire and Emergency Response (SAFER) Grant that allowed the department to hire an additional 24 personnel.

Area Description

Topography

Fayetteville, which is located on the western most portions of the Coastal plains of North Carolina, is mostly flat land with some slight hills. Fayetteville is also located along the Cape Fear River which at one time served as a major trade route. In the early years, the City of Fayetteville was comprised of two smaller settlements that eventually merged and renamed itself after American Revolutionary War General Marquis de Lafayette. The two settlements, Cross Creek and Campbelton, still remain prominent within the community today. Fayetteville spans a land area that covers a total of 94 square miles. The population concentration for the city is 2,134 people per square mile (excluding land for Ft. Bragg). The land use within the city limits consists of mainly residential, commercial, and industrial uses. The vegetation and foliage within the city serve mainly as an aesthetic in improving the look of the community. In this region, there is a prominent array of hard and soft wood trees that add to the city's appeal. Accessibility throughout the city poses little if any problems thanks to an abundance of roads and bridges throughout.

Climate

The City of Fayetteville and the services that the FFD provides are affected by several climate changes throughout each year. On an annual basis, the city receives an average of 47 inches of precipitation. An average high of just over 90 degrees is typically recorded during the summer months and a low of 31 degrees for the winter. The city typically only receives between one and three inches of snowfall per year.



While the amount is moderate, the effects of the storms typically slow departmental responses and functionality until roadways can be cleared of ice and snow. Thunderstorms, which mainly occur during the summer months, pose the most frequent threat to the services that the department provides. During the occurrence of a thunderstorm, often times units are stretched to their maximum in responding to multiple alarm activations, vehicle accidents, and fires that occur as a result. Over the years, the city has experienced several different weather related disasters that include hurricanes, droughts, wind storms, flooding, and winter storms. Through Emergency Management practices, plans have been established in order to mitigate and provided adequate responses for these types of incidents.

Population

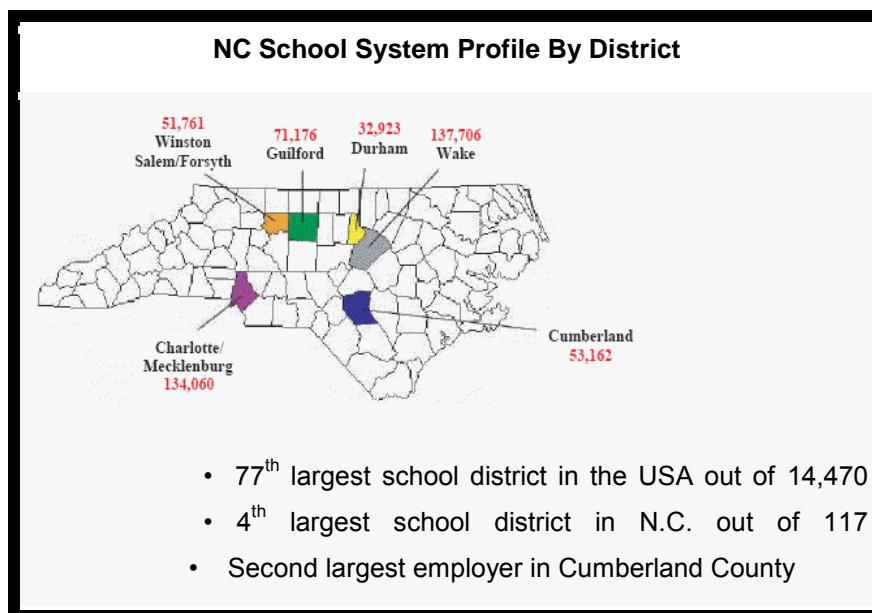
The City of Fayetteville is the sixth largest city and the fifth largest metropolitan in the state of North Carolina. Combining Fayetteville and Fort Bragg, the population for 2011 totaled 200,564 residents. Fayetteville's population accounts for 63% of the metropolitan population. Its metropolitan area which include areas such as neighboring towns Hope Mills, Spring Lake, and others bring the population totals up to over 319,000. Fayetteville is a city which has seen rather significant changes in recent years. Through the Department of Defense's Base Realignment and Closure Commission, a significant need for added growth and development continues to develop here. Over the next three years, the United States Armed Forces Command (FORSCOM) and the United States Army Reserve Command (USARC) will be relocated to Fort Bragg and produce an expected influx between forty and fifty thousand new residents. The average age in Fayetteville is 34.8 years old. Fifty six percent of the population falls between the ranges of eighteen to sixty five years of age. Based on the 2010 Census, 52.1% of the people living in the city were women.





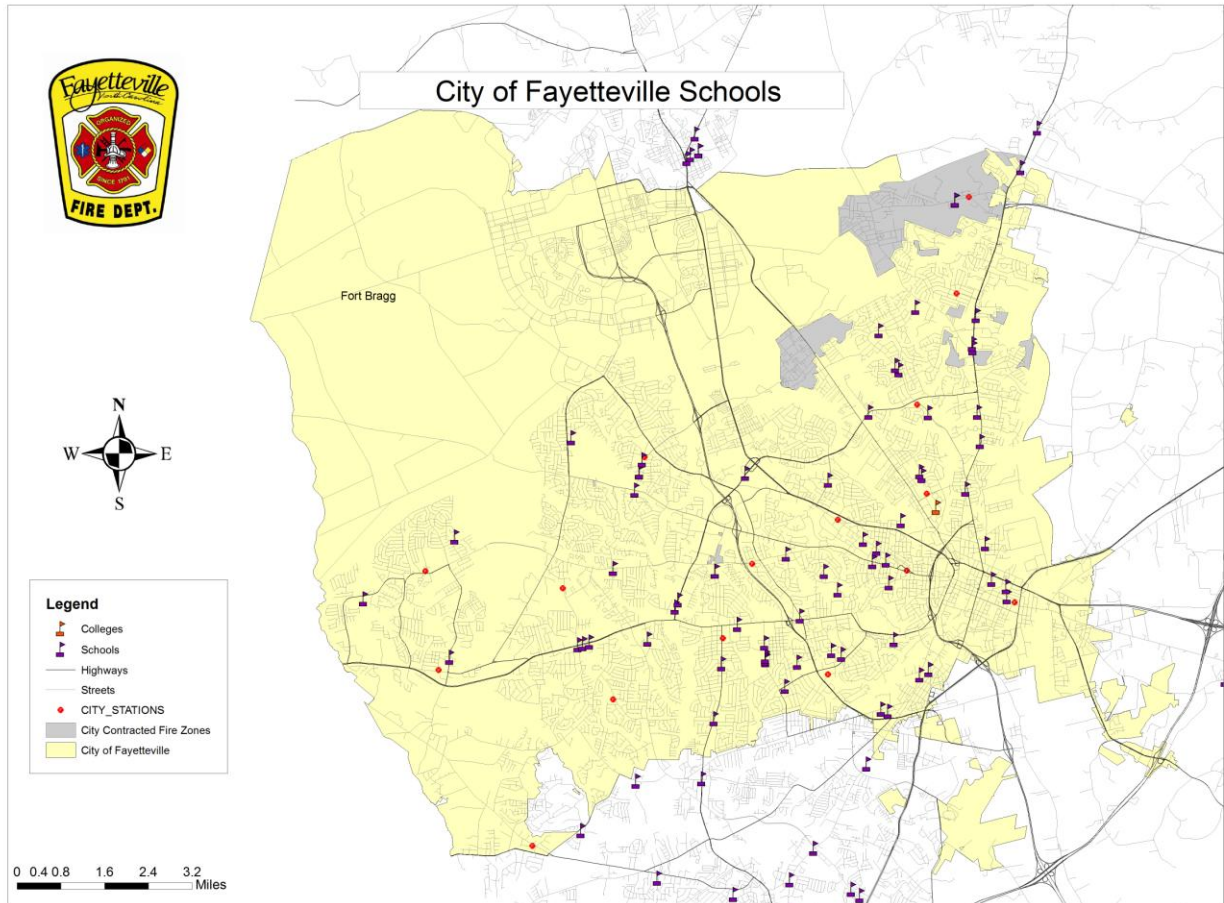
When observing the population based on race, the Caucasian population makes up 45.7% of the city's population while 41.9% are African American. The remaining 12.4% consists of several groups such as: Hispanics, American Indians, Pacific Islanders, Asians, and those reporting two or more races.

Fayetteville has two primary "at risk" populations: The school systems and the housing within the city. Cumberland County Schools is the 4th largest schools system in the state. A large portion of the 87 schools within this system are located within the City of Fayetteville. (See map A.1). The private school system also has several locations within the city limits. There are approximately 53,000 public and 3,895 private school students currently in Cumberland County (staffing not included). The school system is the largest "at risk" population for the department. Typically each school enrolls several hundred students at one time. Fayetteville also has several higher education facilities. The two largest are Fayetteville Technical Community College and Fayetteville State University. Combined they have over twelve thousand enrolled students. It is important to note that only a portion of those who fall under this category are in one location at the same time.





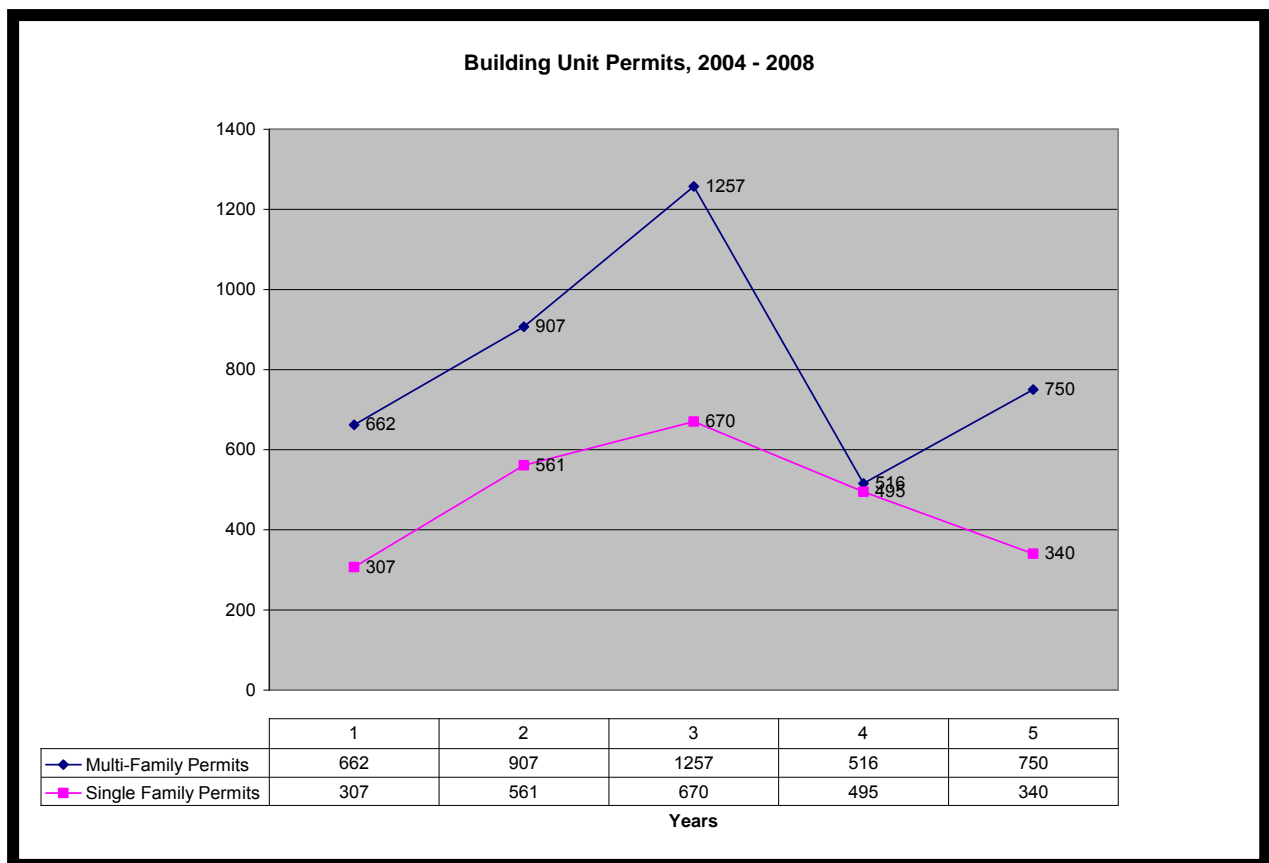
Map: A.1





Housing Characteristics

The housing in Fayetteville consists of a large amount of multifamily dwellings. After the 2000 census was conducted, it was determined that 28% of the housing in the City of Fayetteville was comprised of multifamily dwellings. That number has continued to grow since. Often times these multifamily dwellings consist of several units in one building and are constructed close enough to cause a serious exposure threat in the event of a fire. With the number of people that live in these types of structures, a large “at risk” population is apparent. The following chart shows the number of permitted multifamily units compared to single family permits from 2004 to 2008.





The housing situation in Fayetteville is one that is rather unique. With just over half of the residences in the city being owner occupied, there is a significant presence of citizens who elect to rent in this area. Much of this is due to the predominant military presence in the area accompanied with the knowledge that deployment or new base assignments can come at a moment's notice. With the average age in Fayetteville, being just over 34 years of age and a current weak economic forecast, many elect to rent properties so as to limit liabilities should extreme financial hardships become a reality. Chart A.2 is a diagram of the tenure in Fayetteville. The relatively high vacancy rate of nearly 11% is primarily due to much of the military being deployed. Many families with deployed soldiers have elected to relocate to their home states and towns during times of active deployment. It is expected that as the current process with BRAC and soldiers return from current deployments, the percentage of vacant properties in the city will drop.

Chart A.2

Tenure	# of housing units	Percent
Owner Occupied	41,355	51.42%
Renter Occupied	30,351	37.73%
Vacant	8,728	10.85%
Total	80,434	100%
Source: U.S. Census Bureau, 2006 American Community Survey		



Disaster Potential

The City of Fayetteville has maintained an all hazards preparedness program under the leadership of the Fire Department for many years. The Battalion Commander for Special Operations oversees Emergency Management and coordinates with Cumberland County Emergency Management, Fort Bragg and other regional partnerships for emergency planning and response. The City of Fayetteville has developed an Emergency Operations Plan (EOP) for integrating response activities of all departments. This plan has been implemented to support incident operations for hurricane and winter storms in addition to several multi-jurisdictional events and exercises. The entire plan was revised in 2007 to ensure compliance with the National Incident Management System standards. The City of Fayetteville has been a participant in the planning, research, and development of other plans for disaster response and recovery as well. These plans include the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan, Fayetteville Regional Airport Emergency Disaster Plan, City of Fayetteville Continuity of Operations Plan, and plans developed by the Public Works Commission to support incidents at their high hazard dams located within the city limits.

The City is exposed to many hazards, all of which have the potential to disrupt the community, economy, cause damage, and create casualties. Potential hazards (natural, technological, and national security) for the City include:

- A. Hurricanes
- B. Drought/Floods
- C. Severe thunderstorms
- D. Tornadoes
- E. Severe winter storms
- F. Severe cold weather
- G. Extreme heat



- H. Hazardous materials
 - Transportation incidents
 - Fixed facility incidents
 - Unidentified spills or dumping activity
- I. Large structure fires
- J. Forest or wild land fires
- K. Landfill fires
- L. Severe bridge damage
- M. Aircraft crashes (civilian/military)
- N. Mass casualty incidents
- O. Civil disorder/Riot/Vandalism
- P. Sabotage/Terrorism
- Q. National security emergencies
- R. Power Failures
- S. Dam Failures
- T. Natural Gas Pipeline ruptures
(12 inch main)
- U. Nuclear power plant emergencies

Area Development

Economy

While the sheer size and population of Fayetteville has essentially doubled in recent years, other areas have not made similar strides. Areas such as the industrial field, businesses, shopping centers, and other areas have not been able to keep track with the city's growth. The current economic downturns in the national economy as well as the troubles on Wall Street have affected our local economy significantly. Past increases in fuel prices and the relationship they have with all commodities have also caused additional strains on businesses.



The industrial companies in the area have experienced extreme hardships over the last several years. Despite continuing to be one of the larger employment sectors in our area, industrial companies have experienced nearly 2000 job losses due to the struggling economy and relocation to other countries. Cumberland County is designated as a Tier 1 low wealth county and compared to similar local governments; the industrial field is somewhat limited in growth and revenues. In the City of Fayetteville, due to the lack of industry inside the city limits, the total revenue generated on an annual basis, only accounts for 4%. So while the industry that is in this general location still accounts for several thousand jobs, the development and growth has seen little increase.

Fayetteville spans a land area that covers a total of 94 square miles. The population concentration for the city is 2,134 people per square mile (excluding land for Ft. Bragg). With the several industrial and commercial businesses in the area, there are quite a range of earnings for people throughout. The median household income in 2007 averaged \$42,500. Approximately 17% of the population is currently earning income below the poverty level. Due to the current recession and economic downturn, as of December 2010, the local unemployment rate was 9.0% which was slightly lower than the state average of 9.7%. Government jobs account for 39,000 of the professions chosen in Fayetteville. Other popular professions that people choose in this area include trade, transportation, health care, education, and construction. Next to government jobs, the retail businesses account for the most jobs in Fayetteville. According to the 2000 Census, 23.3% of the jobs in Fayetteville are in the field of retail. The fact that we are a “military” city plays heavily in our current financial woes. The city has felt the effects of the War on Terror for several years now. The massive and constant troop deployments from Ft. Bragg to Iraq and Afghanistan have removed a major source of income from our local economy through a loss of sales tax revenue. Despite the current economic woes that have been experienced, the retail field continues to be one of the largest revenue generators in the city.



Entertainment

Fayetteville has only one major sports arena inside the city limits. *The Crown Coliseum* hosts an array of different sports and entertainment events throughout the year.



This is the home of the Fayetteville Fire Antz, North Carolina's hockey team in the Southern Professional Hockey League. The Fayetteville Guard, which is a part of the American Indoor Football Association, is also based out of the Crown. Along with the annual seasons of the two teams, a number of events are scheduled during the year. Concerts from various groups, Wrestling Entertainment, The Holly Day Fair, and several others all take place at this location. The development of the *Crown Civic Center* has spanned over quite a number of years. Since opening the doors of the original Civic Center in 1967, the *Crown Civic Center* has been the heart of entertainment for southeastern North Carolina for more than four decades. The original structure, a 2,400-seat theatre and 4,500-seat arena, underwent a major renovation in 2006 and has hosted diverse and distinct events. The *Crown Expo Center* was added in 1987 as a premier convention and meeting space and houses the Cumberland County Cooperative Extension. *The Crown Coliseum* which is an 8,500 seat venue opened in 1997.

Construction

Fayetteville, which is one of the oldest cities in the state, has seen developments in construction during its course of over 200 years. Through the development of housing, business, and industry, there is quite a diverse mixture in building stock. The downtown and Haymont areas of the city have some of the oldest buildings. Directly across from city hall is the Prince Charles Hotel which was constructed in 1925. Throughout these areas, you will find several structures that were once homes converted into business offices.



Many of these homes were constructed in the late 1800's and early 1900's. One of the oldest existing structures in the center of the downtown area is the Market House. It was constructed in the year 1832. Serving only as a historical monument, it has become a fixture and defining earmark for the City of Fayetteville. New Construction is also apparent in the city. Throughout the city there are new residential subdivisions that have been developed, retail businesses constructed, and many others that have grown over the years. Due to the ample amount of land area, the city does not typically mirror other cities with large high rise buildings. The eleven story Systel building is the tallest structure in the city. Thanks to the abundance of the mostly flat land, the ability to build "out" instead of "up" is available. Most of the larger structures within the city are no more than two to three stories in height.

Much of the newer construction and commercial properties are located along the major thoroughfares in the city. Primarily these structures are located along roads such as Skibo Rd., Ramsey St., Owen Dr., and Raeford Rd. A smaller number of the new construction and businesses are located along side streets and feeder roads. The most recent in-voluntary annexation areas are also beginning to experience some growth too. A large portion of these areas were primarily residential properties and thanks to the demand for housing from the military, Fayetteville has been able to maintain one of the best residential real estate markets in the country. In recent times, Fayetteville has received positive reviews regarding the real estate market. One such review rated Fayetteville as one of the top five cities in the nation to sell a house. The Nationally televised program, "Good Morning America," has also mentioned these reviews.

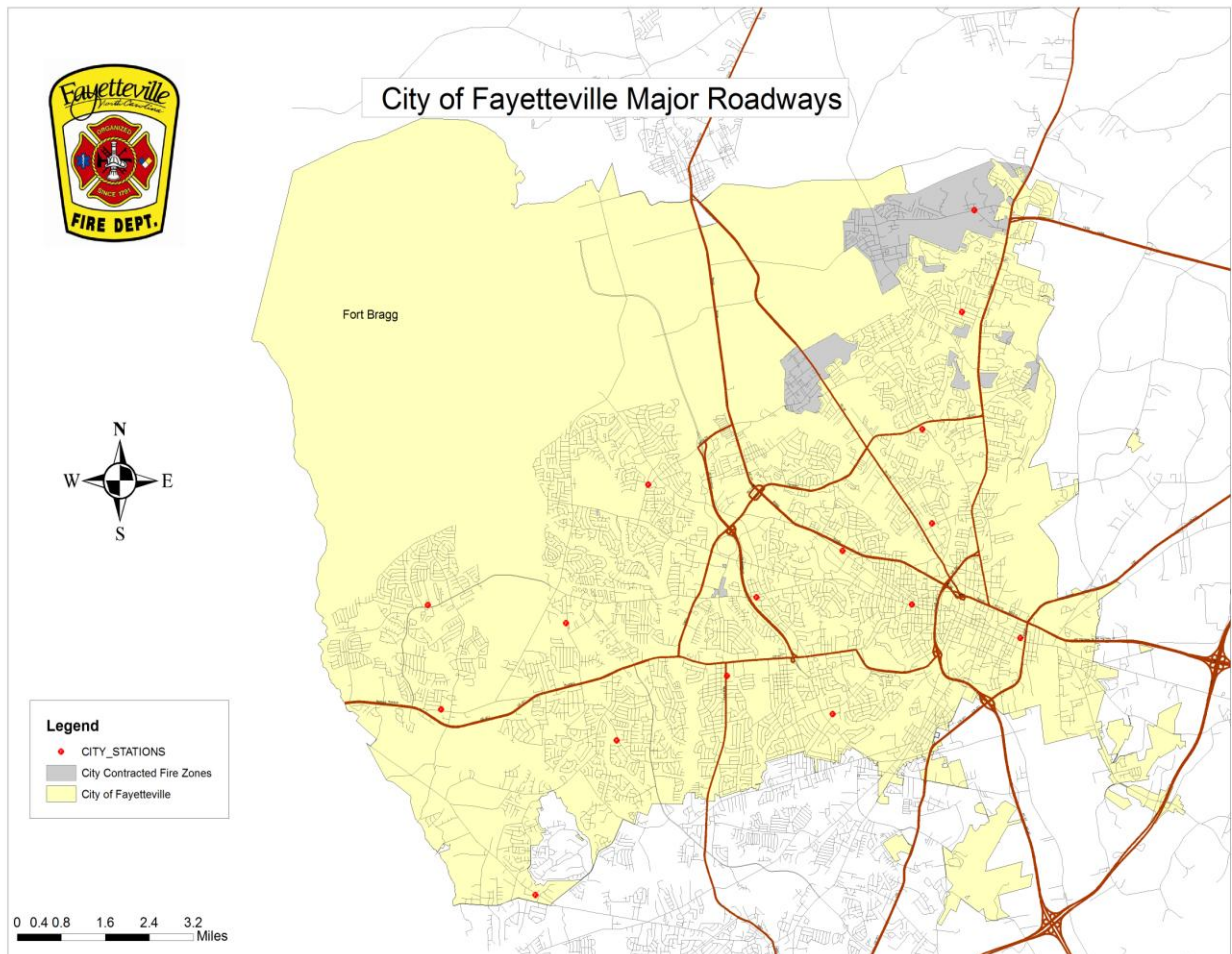
The City of Fayetteville continues to be one of the most diverse communities in the state. With the heavy military presence from Fort Bragg, the city caters much of what it offers in their favor. Fayetteville has been considered the most military friendly city in the nation, by Time Magazine. Despite economic hardships and limited growth due to things such as the current military deployments, Fayetteville stands poised for future growth and development.



Demographic Features

Roads

Interstate 95 traverses Cumberland County from North to South and intersects some of the eastern portions of the City of Fayetteville. US 301, US 401, NC 24, NC 53, NC 87, and NC 210 are the major traffic routes for tourists and commercial traffic through the City. Public roadways within the City are owned and maintained by either the City or the NC Department of Transportation (NCDOT).

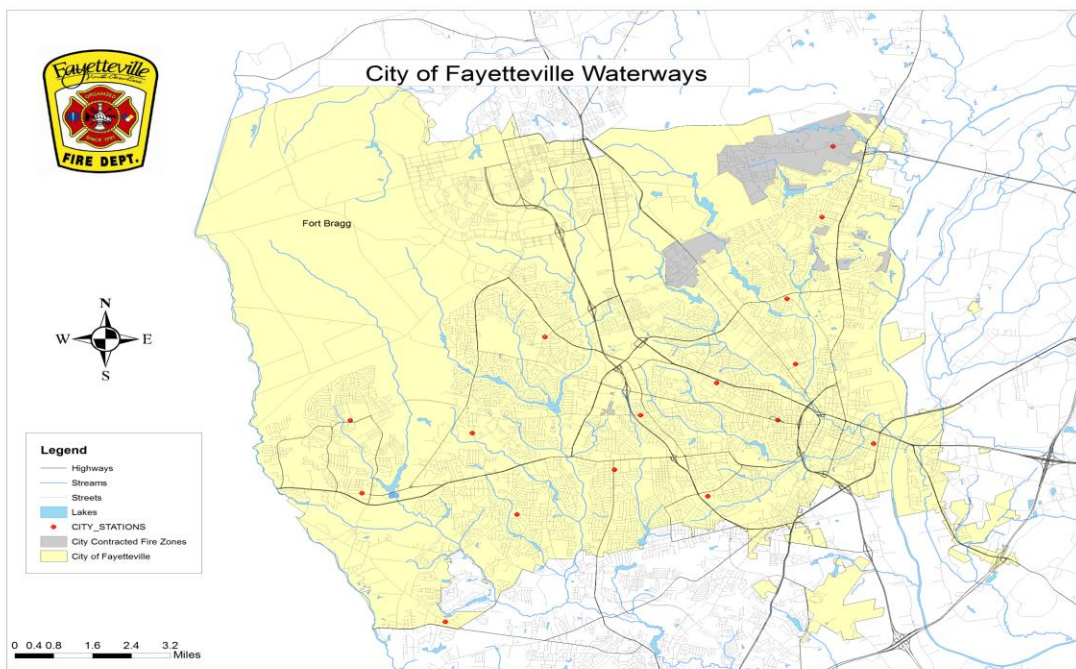




Waterways



The Cape Fear River, which runs through the city, was once the main travel route for merchants in the 1700's and 1800's. Today, the river is primarily used for tourist and recreational activities. The Cape Fear River Walk is the primary attraction along the banks of the river. It spans four miles in one direction and provides magnificent scenic views for anyone wishing to travel it. Along the trail are interpretive signs explaining the wildlife and plant life found in the area. There are more than 700 species of plants and trees, and 150 species of birds. The River Trail area is also home to an unusual combination and diversity of hardwood trees. Frogs, lizards and turtles are common sights, with an occasional deer. The trail is designated as part of the East Coast Greenway. The Greenway is a series of urban trails and greenways that will eventually connect from Maine to Key West Florida, similar to the Appalachian Trail.





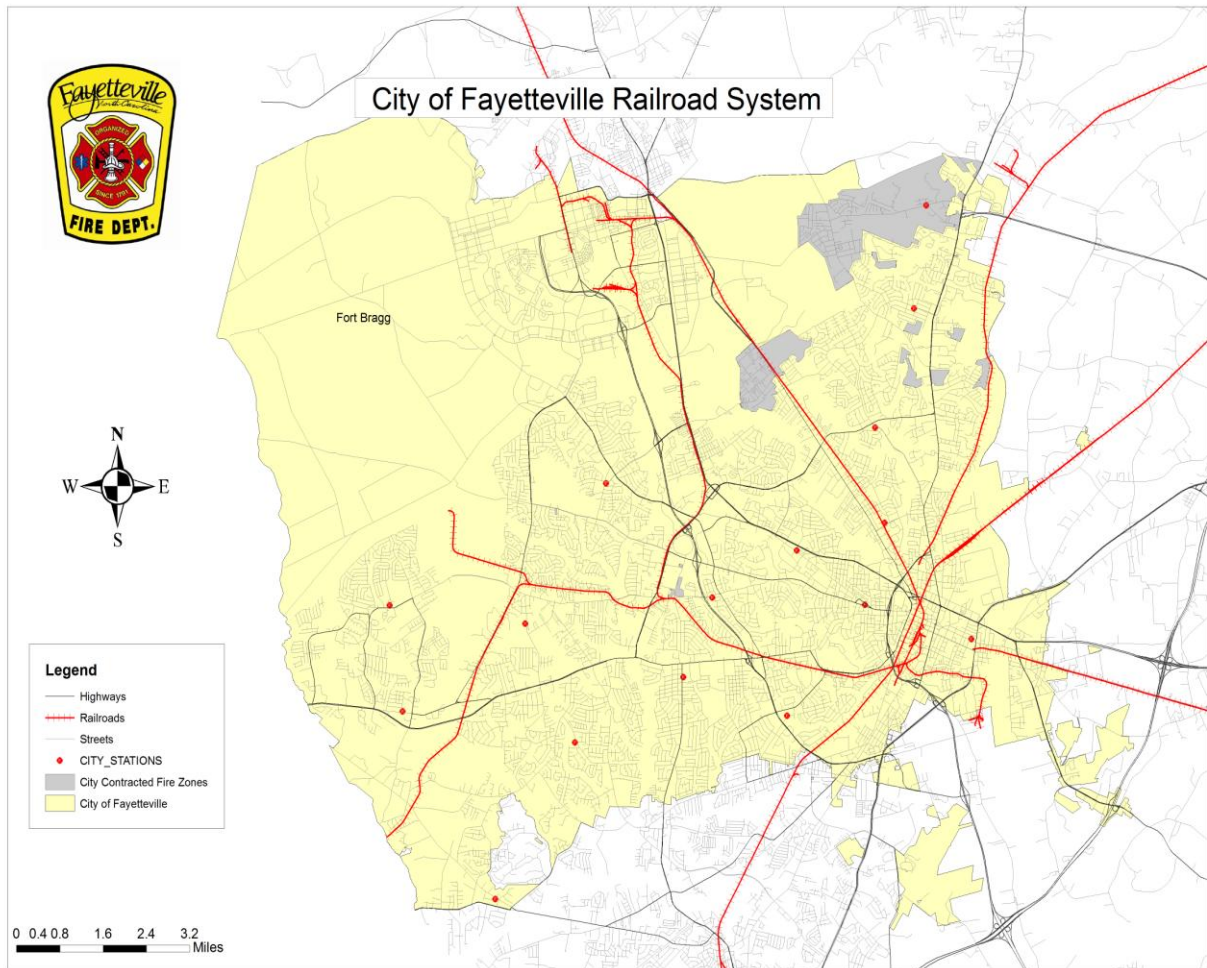
Railroads

The city also has the luxury of having a railroad system that provides additional routes of travel in and out of the city. The train depot which is now located in the downtown area on Hay Street was constructed in 1911. This station was constructed by the Atlantic Coast Line Railroad. This was the third station constructed in Fayetteville. Cape Fear and Yadkin Valley Railroad Company (CF&YVRR) opened in Fayetteville in 1879 as a reorganization of the former Western Railroad, which connected Fayetteville with coal mines to the northwest. The depot opened in Fayetteville in 1890, the same year the railroad was connected with Wilmington. The result was a northwest to southeast railroad connecting Mt. Airy, Greensboro, and Wilmington, with connections into South Carolina. Today, there are five major rail systems that operate in the City of Fayetteville and Cumberland County. These are Aberdeen & Rockfish, Amtrak Cape Fear, CSX, and Norfolk Southern. Passenger and freight trains pass through the Hay St. station several times daily traveling between New York and Florida. Several other Freight trains travel through the city on a daily basis as well. Listed below is a map of the railroad system here in Fayetteville. Map A.3





Map A.3





Airports

The Fayetteville Regional Airport serves a 12-county area in the Sandhills of southern North Carolina, along the I-95 corridor. Fayetteville Regional Airport is

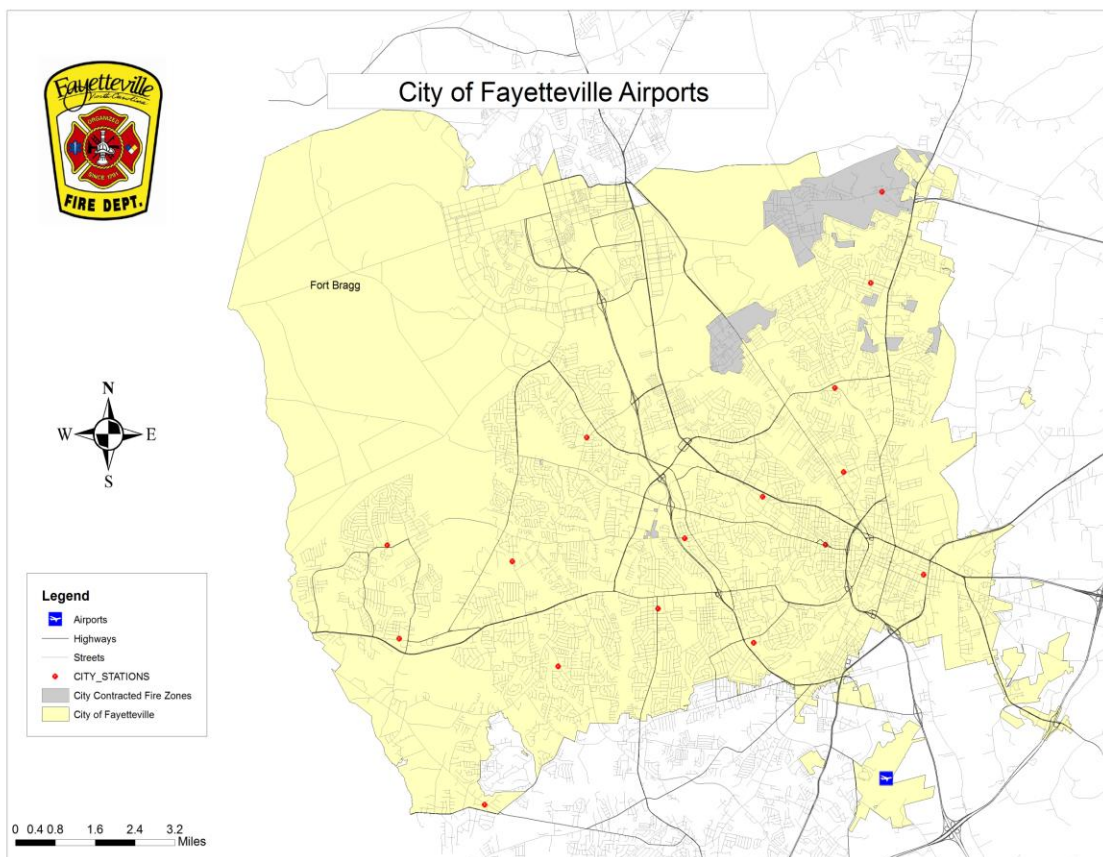


serviced by two main airlines: US Airways Express, with



daily service to its Charlotte NC hub and ASA, the Delta Connection, with daily service to its Atlanta hub. On a daily basis, there are approximately 1,200 people either flying into

or out of Fayetteville Regional Airport. Between the two airlines that operate out of Fayetteville Regional, this accounts for over 420,000 people annually.





Component B: Services Provided

Service Level Objectives

This section sets the performance standards and objectives for each risk type. It matches the deployment needs and required tasks to meet the stated objectives and outcomes for the department, determined for mitigating emergencies.

Service Delivery Programs

The Fayetteville Fire/Emergency Management Department is a diverse organization that offers a wide range of services to the community served. Our primary function is to provide fire protection to the citizens of the City of Fayetteville. This is done with a staff of over three hundred personnel, sixteen fire stations, and a vehicle fleet that is equipped with a large cadre of specialized equipment. Personnel train on a monthly basis to ensure that an adequate skill level is maintained in order to effectively carry out the duties that pertain to our response requirements. In addition, these skills allow the personnel of the department to maintain an elevated level of safety and awareness which protects not only the public but the firefighter as well.

While fire protection is the department's primary function, it only accounts for a small percentage of the call volume that we experience on an annual basis. Seventy six percent (76%) of the department's annual call volume is EMS related. With that in mind, the department provides the equipment, personnel, and training to adequately provide first responder services to the public. Every firefighter of the department is required to maintain an Emergency Medical Technician Basic Level Certification with the North Carolina Office of EMS. With this certification, we can provide care to patients with respiratory, cardiac, traumatic, and many other medical conditions. Our program serves as a supplement to the Cumberland County Emergency Medical Services. They provide paramedic level care and provide transport to medical facilities for patients needing it.



The need for our first responder program developed out of an ever increasing demand for this level of service and our ability to initiate patient care much faster than that of Cumberland County EMS.

In addition to the two primary services we provide, Fire and EMS, the department also provides several others that are key to the public's safety. Programs such as Hazardous Materials mitigation, Technical Rescue, Emergency Management, Aircraft Rescue Fire Fighting (ARFF), and Child Safety Seat Clinics are some of the other services that the department has developed over the years. These programs require specialized training that allows our personnel to perform the duties and critical tasks assigned. There are additional organizations that the department has close working relationships with who are readily available in the event that the department encounters an emergency that warrants assistance. These include Helicopter Transport, NC Forestry Fire Control, and NC State Bureau of Investigation (Fire Investigation)

Listed below is a breakdown of each individual program that will provide a better understanding of the operations. While there are several programs that are managed by the department, each play a vital role with ensuring the best available protection is provided. Many of the programs are utilized on a dual basis and require extensive teamwork to see that whatever the emergency is, it is contained or controlled in a safe and efficient manner.

Fire Suppression:

ENGINE COMPANY



A team of 3 or 4 firefighters assigned to an apparatus with water pumping capabilities. These vehicles carry water, fire hose, tools used to extinguish fires, and are equipped with a pump capable of discharging up to 1500 gallons of water per minute.



TRUCK COMPANY



A team of 3 to 4 firefighters assigned to an apparatus with a 75' to 100' aerial ladder used to rescue persons trapped by fire in the upper floors of buildings. The vehicle carries a full complement of ground ladders, has an onboard water tank, hose and is equipped with a pump capable of discharging up to 1500 gallons of water per minute.

BRUSH TRUCK



A fire unit used for controlling woods, grass, and field fires. The unit has the ability to go off road if needed with four-wheel drive.

BATTALION COMMANDER



The City of Fayetteville is divided into 3 fire battalions. One Commander is responsible for each battalion. **Battalion 1** consists of fire stations 1, 2, 3, 7, 14 and 19. **Battalion 2** consists of fire stations 4, 5, 6, 9, and 10. **Battalion 3** is consists of fire stations 8, 11, 12, 15, and 17. They provide shift supervision as well as Incident Command during fire ground operations and other major incidents.



Rescue:

RESCUE COMPANY



FFD is considered a Heavy Rescue Provider. A team of 5 firefighters are assigned to a vehicle with specialized equipment that responds to technical rescues such as vehicle crashes, overturned vehicles, entrapments, water rescues, confined space, trench, as well as high and low angle rescue incidents.

EXTRICATION



Personnel are trained at removing victims who are entrapped or pinned in vehicles, buildings, or machinery.



WATER RESCUE



Personnel are trained in boat safety and water rescue. In the event of an incident, the department has several strategically located boats stationed throughout the City of Fayetteville.



COLLAPSE SEARCH AND RESCUE TEAM



disasters such as a hurricane, flood, or earthquake.

Team trained for Collapse, Search and Rescue. A group of firefighters, EMS, and police officers specially trained in technical rescue techniques. The City of Fayetteville has CSAR-1, CSAR-2, and CSAR-3. The first responsibility of the unit is Cumberland County however they could be dispatched by the State Emergency Management office to help in natural

Medical:

SQUAD COMPANY



Two firefighters assigned to a vehicle that responds to medical emergencies, and provide support at fires and technical rescue incidents.

MEDIC UNIT



Cumberland County EMS provides paramedic level service to all of Cumberland County. Two personnel assigned to each unit with at least one paramedic on every unit. Responds in conjunction with the FFD and provides support at medical, fire, and any other applicable incidents.



PATIENT CARE



Fire Department personnel are trained at the EMT-Basic Level and provide care to patients. Personnel are trained in providing care for cardiac arrest, respiratory, traumatic, temperature related, and several other emergency situations to patients.

Specialized Services:

HAZARDOUS MATERIALS



HAZMAT - A team of trained personnel that responds to nuclear, chemical and biological hazardous material incidents. FFD provides HAZMAT coverage to the county and state.





REGIONAL RESPONSE TEAM -3



The NC Hazardous Materials Regional Response program is a system of seven teams strategically located in the state to provide hazardous materials response services to the citizens of North Carolina. The RRTs are available to respond whenever an incident exceeds local capabilities with technical support, manpower, specialized equipment and/or supplies. RRT-3 covers the counties of: Lee, Harnett, Johnston, Wayne, Moore, Richmond, Hoke, Scotland, Robeson,

Bladen, Sampson, and Cumberland counties.

EMERGENCY MANAGEMENT



Through the use of emergency management, the FFD has developed and initiated plans for the response to a multitude of possible events that could occur in our area. As a result of these programs, there have been numerous training drills performed to ensure our state of readiness.

AIRPORT RESCUE FIRE FIGHTING (ARFF)



Similar to typical fire suppression, ARFF is specifically designated for incidents involving aircraft crashes and rescuing victims in the event of an airport incident. These units can be fully operated by one individual.



CHILD SAFETY SEAT PROGRAM



Funded through the state of NC, the FFD operates a child safety seat replacement program that is geared toward reducing the number of children who have either defective child seats or where the child has out grown the limits on the seat itself. Safety checks are also performed to check for proper installation and that the child is appropriately fitted for the car seat.

Additional Resources:

ARSON INVESTIGATOR



This is a person that is trained to investigate the cause of a fire. The department has several personnel assigned to the FFD Fire Investigation Team (FIT). In addition, there is a close working relationship between the department and the NC SBI Fire Investigation Division.

N.C. FORESTRY FIRE CONTROL



Size-up woods fires for state resources to be used. They are based out of the Fayetteville district office at the Fayetteville airport. Each unit is equipped with a tank of fire retardant averaging about 130 gallons in capacity. Units are also supplied with a hose and reel to apply the retardant. In addition, each truck serves as a resource for hand tools and safety equipment.



N.C. FORESTRY PLOWS



NCDNR's specially equipped bulldozers are a vital part of the Division's fire suppression efforts. Several models of these machines are strategically stationed around the state. Each bulldozer has a Forest Fire Equipment Operator assigned to it. These operators tow their dozers on "low-boy" tractor-trailers to needed locations. The operators are highly trained for the unique challenges of fire suppression and are able to work in difficult, often dangerous conditions.

HELICOPTER TRANSPORT



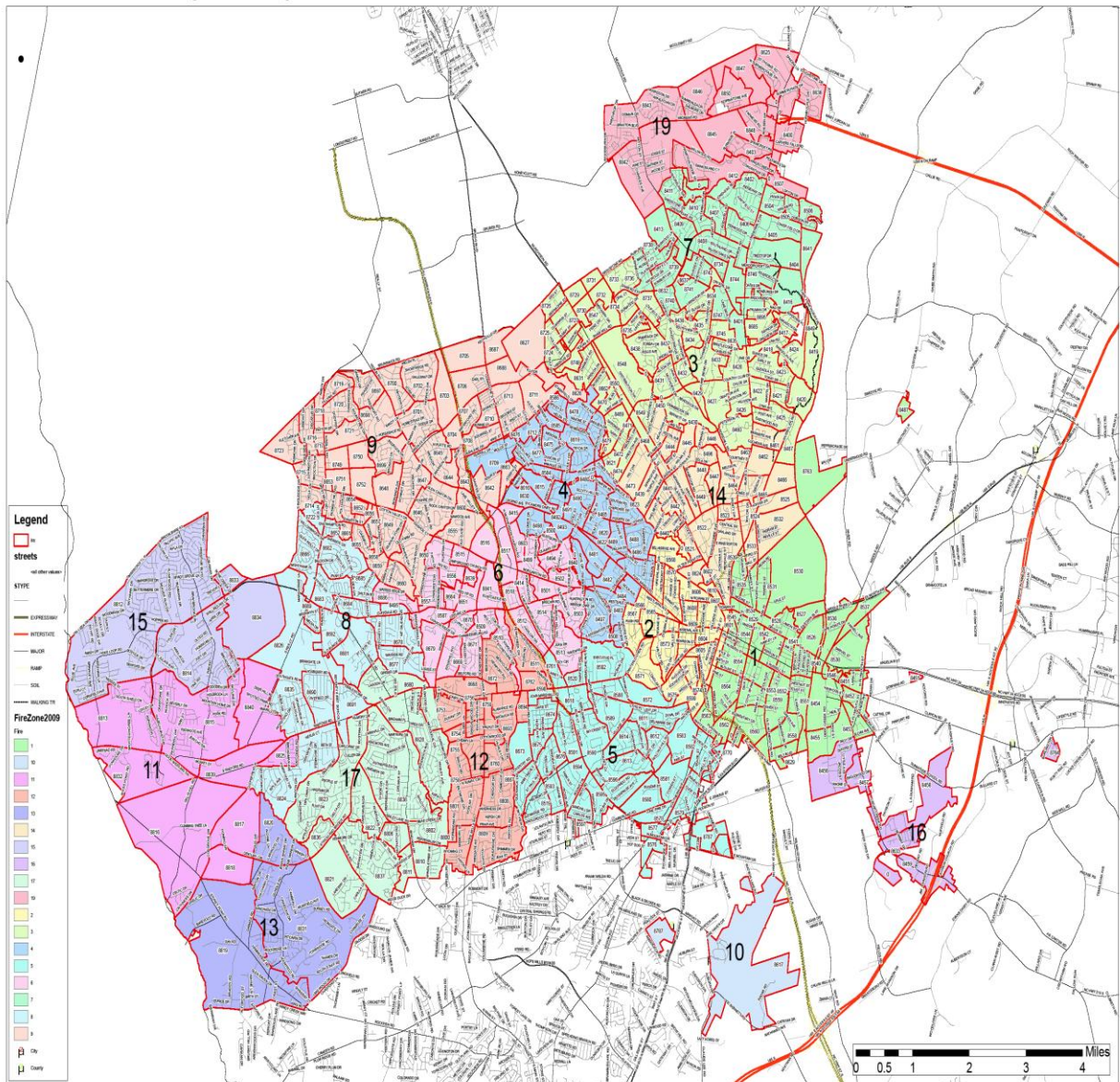
The City of Fayetteville and Cumberland County are served by Carolina Air Care of UNC Hospital. The service has a helicopter stationed at Cape Fear Valley Hospital 24 hours a day 7 days a week and uses the radio call signs TARHEEL 1 or TARHEEL 2. If Carolina Air Care is not available Duke Life Flight will be dispatched.





Current Deployment

City of Fayetteville Fire Stations and Zones October 2009





Fire Station 1
607 Person Street

Telephone – 910/433-1731
FAX - 910/433-1067



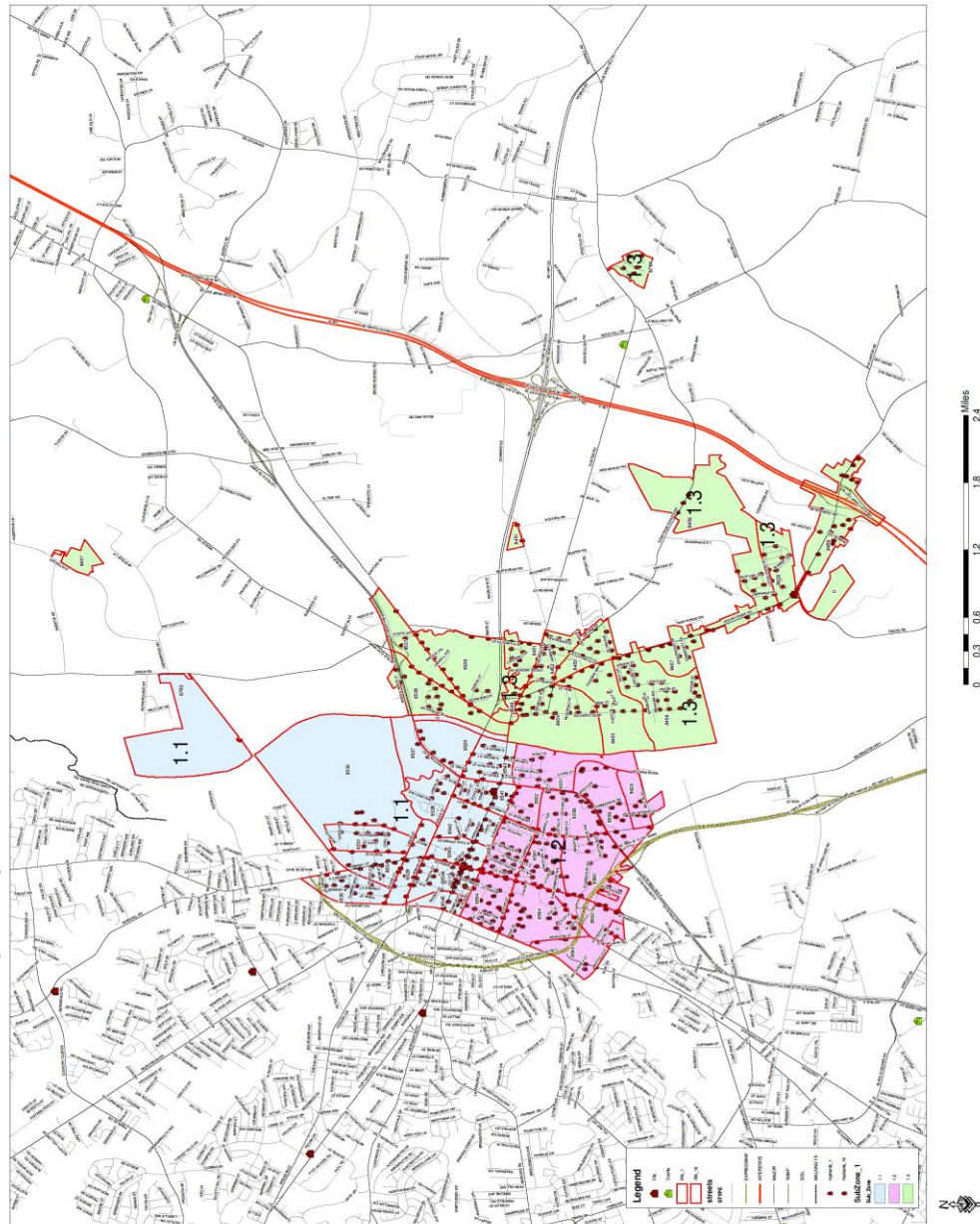
Construction Date- 1997 **Size –** 10334 square feet **Number of Bays-** 8

Located at 607 Person Street, in the Downtown area, Station 1 has a daily minimum staffing of eleven (11) personnel operating Engine 1, Engine 16, Truck 1, Squad 1, Hazmat 1 and Boat 1 out of this location. North Carolina Hazmat Regional Response Team 3 is based out of here, and is staffed by the personnel assigned to this station.



Station 1 Response Area

City of Fayetteville Fire Stations and Zones - Zone 1





Station 1

Units



Engine 1



Engine 16



Station 1

Units



Truck 1



Squad 1



Station 1

Units



HazMat 1



Boat 1



Station 1

Units



Carolina Haz-Mat Regional Response Team 3



Regional Response Team 3 Support Trailers



Station 1

Units







Regional Response Team Support Vehicles



Station 1

Response District Description


District Location and Description

-  The Station 1 response district is located in what is considered the downtown portion of the City of Fayetteville. It is the primary location of where the City began growing over two hundred years ago. The Cape Fear River which is now primarily a recreational and tourist attraction for the city used to be the primary trade route when it was first developing. It is because of this close proximity to the Cape Fear River that the downtown district was formed. This location is the seat of both Cumberland County and the City of Fayetteville administrative offices. While there is an array of different types of construction, many of the buildings are well over 100 years old. This district is the location of many of the community based festivals and concerts that take place throughout the year as well. Much of the center portion of this district is primarily business related occupancies while the residential areas tend to be towards the outskirts of the district.
-  The Station 1 district receives support from some of the bordering stations within the City. Stations 2, 5, 14, and County Fire Station 2 typically provide the initial assistance to this district during emergency situations. Following the major thoroughfares, the district extends to the west, stopping at the intersection of Hay Street and Winslow Street. The district is met by the borders of Station 2 at this location. In the southern direction, the district meets stations 5's district near the intersection of Southern Avenue and Whitfield Street as well as Eastern Boulevard and the MLK Freeway. The northern edge of the district is bordered with station 14 at Ramsey Street and Drake Street. The eastern portion of the district extends out just past the Interstate 95 Interchange on Cedar Creek Road. County Fire Stations 2 borders the district at this location.
-  While there are large amounts of connecting streets within this district, the primary roadways throughout this district are as follows.
 - Eastern Boulevard /Hwy. 301-Business I-95N
 - Cedar Creek Road / Hwy. 53
 - Grove Street and Rowan Street / Hwy. 24
 - Gillespie Street and Ramsey Street / Hwy 401 N
-  The one train depot that is located within the City of Fayetteville is located within this district. It is located on Hay Street. Today, there are five major rail systems that operate in the City of Fayetteville and Cumberland County. These are Aberdeen & Rockfish, Amtrak Cape Fear, CSX, and Norfolk Southern. Passenger and freight trains pass through the Hay St. station several times a day and travel between New York and Florida. The rail runs from North to South,




entering from the North after crossing the Cape Fear River at River Rd. and proceeding South toward downtown after crossing over Ramsey St and Drake St. The tracks continue through downtown crossing at Hillsboro St. and Cumberland St. then again at Hay St after passing the Train Station then crossing Franklin St. and Winslow St. The next crossing is the Russell St Winslow St intersection. The tracks continue south to Blount St and cross Blount St then proceed south and cross Whitfield St and Waterless St then continue South crossing under Owen Dr and out of Cumberland County.


Critical Facilities and Public Buildings

 There are several small apartment complexes located throughout the district. However, the majority of these typically require the same amount of resources as any other initial dispatch. There is one large apartment complex located in this area. There are also several large hotels that are located throughout the district that house large numbers of citizens on a daily basis. These facilities are primarily located along the Interstate 95 Interchange and Eastern Boulevard. Listed below is a list of the apartment complex and hotel chain located in this area.

- Eastside Greens Apartments
- Holiday Inn
- Economy Inn
- Motel 6
- Doubletree
- Ramada Inn

 This district is home to the largest public housing populations within the City of Fayetteville. Four separate locations make up the majority of the public housing throughout the district. They are listed as follows


- Grove View Terrace – Grove Street
- Campbell Terrace – Campbell Avenue
- Point Place – Point Place
- Alfred Street – off of Campbell Avenue

 As mentioned previously the location of this district is the home of the County Seat. Therefore there are several government owned facilities, including the City of Fayetteville Offices are located here. Local landmarks that are of significant value to the history and importance of this city are located in this area as well. Listed below is a list of the jails, courthouses, and some historical buildings.


- Cumberland County Jail
- Cumberland County Law Enforcement Center
- Cumberland County Courthouse
- Cumberland County Administrative Offices




- Cumberland County Library
- City of Fayetteville City Hall
- City of Fayetteville Fire Department Headquarters
- City of Fayetteville Police Department Headquarters
- City of Fayetteville Market House (Historical Value)
- Fascinate-U-Museum (Historical Value)
- Cumberland County Transportation Museum (Historical Value)

 Cumberland County Schools System is the fourth largest school system in the state. Located within this district are three of the schools that make up this system. In addition to these three there is also one additional private school that is located here. There are not any colleges or universities located in this district. Listed below are the names of the schools in this district.

- T.C. Berrian Elementary School – CCSS
- Walker Spivey School – CCSS
- Pauline Jones Elementary School – CCSS
- St. Ann's Catholic School – Private

 The Public Works Commission is the primary provider of water and power for the City of Fayetteville. The main administrative offices are located within the district. The PWC Waste Water Treatment facility which is also located at 601 North Eastern Boulevard is located in this district as well. The PWC Butler Warner Power Plant is also located on Custer Avenue.




 Hazardous Materials Industrial complexes: None

 There are two main transportation hubs that are located in the downtown district. Located at the intersections of Hay Street and Winslow Street is the Amtrak Train Station. This serves as a means of travel for several thousand people each year who wish to travel between Florida and New York. The Greyhound Bus Station, which is located on Person Street, also serves as an alternative mode of transportation as well.



 Hospitals, Medical Complexes: None



Water Supply

-  Areas lacking sufficient coverage: None
-  There are two separate water companies that operate within the City of Fayetteville. The primary provider of water for the City of Fayetteville is the Public Works Commission. The Aqua Water Company also provides service in certain areas of the City. However within the Station 1 district of the City, all water and available hydrants are maintained by the Public Works Commission.
-  There are a total of 579 hydrants located in the Station 1 district. The use of hydrants is the only source of water supply that is used within this district. There are not any designated static water points within this district. In addition, the units that are stationed within this district do not carry the equipment needed to retrieve water from such a source.

District-Specific Considerations

-  Identify areas of limited access: None
-  Identify areas of special concern
 - Flood-prone areas: None
 - Bridges with low weight restrictions: None
 - Any additional areas of consideration



Fire Station 2
101 Olive Road

Telephone – 910/433-1732
FAX - 910/433-1777



Construction Date- 1940

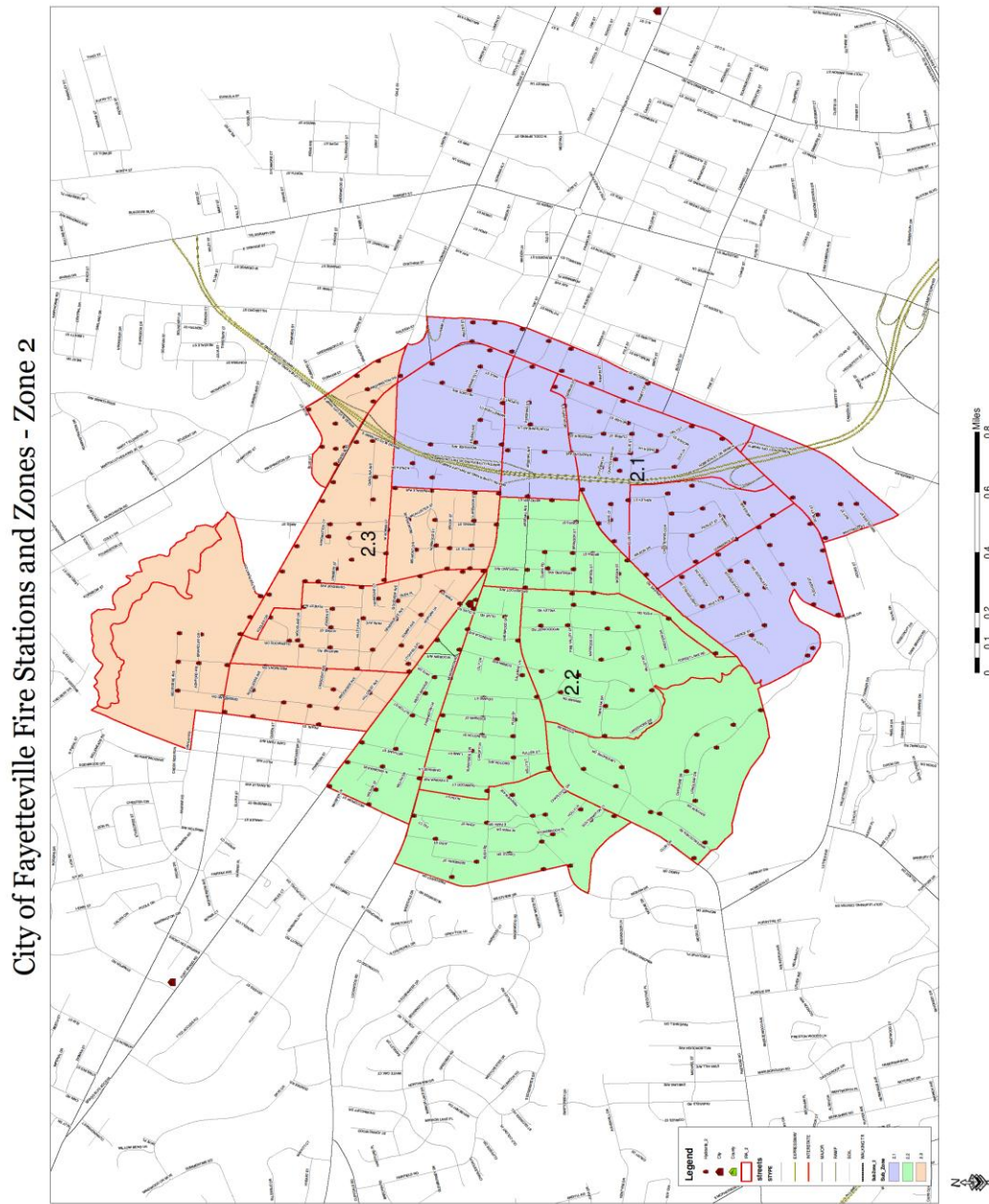
Size – 5500 square feet

Number of Bays- 2

Located at 101 Olive Road in Historic Haymount, Station 2 has a daily minimum staffing of three (3) personnel. It is a single company station with Engine 2 operating from this location. This is the oldest station still in operation in Fayetteville, and is home to the organization's Fire History Museum.



Station 2 Response Area





Station 2

Units



Engine 2



Station 2

Response District Description

District Location and Description

🔥 The Station 2 response district is located in what is considered the historical district. Located here are some of the oldest residential dwellings in the City of Fayetteville. Many of the houses are well over 100 years old. This being primarily a residential district is due in part to the development of the City in its earlier years. While the downtown district was originally the main hub for business within the City, citizens established homes atop what is known by most as Haymont Hill. The location of these homes put citizens within close proximity to many jobs and other day to day necessities people were accustomed to during that time. There are a small amount of business's located within this district, but are primarily locally owned and operated by citizens. Many of these businesses are located in residential homes that have been converted into business space. The majority of the commercial business space within this district is located on Hay Street, which is the main thoroughfare through the district.

🔥 The Station 2 district receives support from other bordering stations within the City. Stations 1, 4, 5, and 14 typically provide the initial assistance to this district during emergency situations. Following the major thoroughfares, the district extends to the east, stopping at the intersection of Hay Street and Winslow Street. The district is met by the borders of Station 1 at this location. To the western portion of the district on Fort Bragg Road, it is bordered by Station 4 at Woodrow Street. To the north it is bordered by Station 14 at Bragg Boulevard and Filter Plant Drive. Located to the south, Station 5 connects with the district at the intersection of Raeford Road and Fairway Drive.

🔥 Because the Station 2 district is primarily a residential district, the large number of neighborhood streets allows for several different paths of travel in the event of an emergency. The major thoroughfares for the district only account for a small portion the actual roadways through this area. While these major roads only account for a small area of the district, the do provide quick access to neighboring districts when assistance is needed. The major paths of travel through this district as listed below.

- Raeford Road
- Bragg Boulevard
- Hay Street/Fort Bragg Road
- Morganton Road
- Highway 87/MLK Freeway



- The one train depot that is located within the City of Fayetteville dissects Station 1 and 2's districts. Even though the actual location of the depot is located in Station 1's district, this can hinder responses from both stations. In the event of a train passing through the city, a delayed response from either station could cause problems. In addition, incidents involving trains typically require a response from both station 1 and 2

Critical Facilities and Public Buildings

- There are several apartment complexes that are located throughout the district. They range in sizes of being able to house several hundred people to multifamily dwellings that have from four to eight apartments per building. Listed below is a list of the apartment complexes that are found throughout the FFD Station 2 response district.
 - Clarendon House Apartments
 - Value Place Apartments
 - Woodside Apartments
 - Brandywine Apartments
- The historical significance of the City of Fayetteville is made apparent throughout this district. The location of several historical houses, museums and monuments can be found in various locations within the district. Below is a list of monuments and locations that carry historical significance for the Station 2 response district.
 - Airborne and Special Operations Museum
 - FFD Historical Museum
 - 1897 Poe House
 - Charles Rose House
 - Colton-Clark Monaghan House
 - Dr. A.S. Rose House
 - Fair Oaks
 - Hale House
 - Henry McLean House
 - Holt Harrison House
 - Iron Mike Statue
 - Rankin House and Gardens
- Cumberland County Schools Systems is the fourth largest school system in the state. Located within this district are two of the schools that make up this system. In addition there is also two charter schools located in the district. There are not any colleges or universities located in this district. Listed below are the names of the schools in this district.
 - Alma Easom Elementary School – CCSS
 - Margaret Willis Elementary School – CCSS



- Alpha Academy Elementary School – Charter School
- Alpha Academy Middle School – Charter School

- 🔥 There are two major medical facilities located within the Station 2 primary response district. The first is Highsmith-Rainey Specialty Hospital. This is a vital part of Fayetteville and the surrounding community. The hospital provides long term acute care beds and a four bed intensive care unit. The hospital specializes in long term acute care for patients who are very sick and require stays of 25 days or longer. The second is the Cumberland County Mental Health Building. This building is one of several of the Cumberland County Mental Health Department. Here, patients are provided with psychiatric care aimed at improving his/her overall well being.

Water Supply

- 🔥 There are not any identified areas of insufficient water supply within this district. Even though, this district is one of the oldest and therefore has some of the oldest water lines in the City, the Public Works Commission has continually maintained service and replacement of water mains in this area.
- 🔥 There are two separate water companies that operate within the City of Fayetteville. The primary provider of water/hydrants for the City of Fayetteville is the Public Works Commission. The Aqua Water Company also provides services in certain areas of the City. However, within the Station 2 response district, all water and available hydrants are maintained by the Public Works Commission.
- 🔥 There are a total number of 271 hydrants located in the Station 2 response district. The use of hydrants is the only source of water supply that is used within this district. There are not any designated static water points within this district. In addition, the unit that covers this area does not carry the equipment needed to retrieve water from such a source.

District-Specific Considerations

- 🔥 Much of the district is made up of one way streets that are extremely narrow for fire apparatus to navigate down. This is due to the fact that the streets as well as the houses are very old and were not constructed to fit the size fire apparatus that is typically driven today. When navigating these streets slower speeds and extreme caution is taken to ensure safety. Often times, the use of an aerial apparatus is impossible because of the sheer size and inability to maneuver through the streets. The one way streets can cause delays in response times if one isn't familiar with the district. Missing one street to turn on could result in extended response times and the ability to achieve benchmark times.



Fire Station 3

3225 Rosehill Road

Child Safety Seat Permanent Check Station

Telephone – 910/433-1733

FAX - 910/433-1138



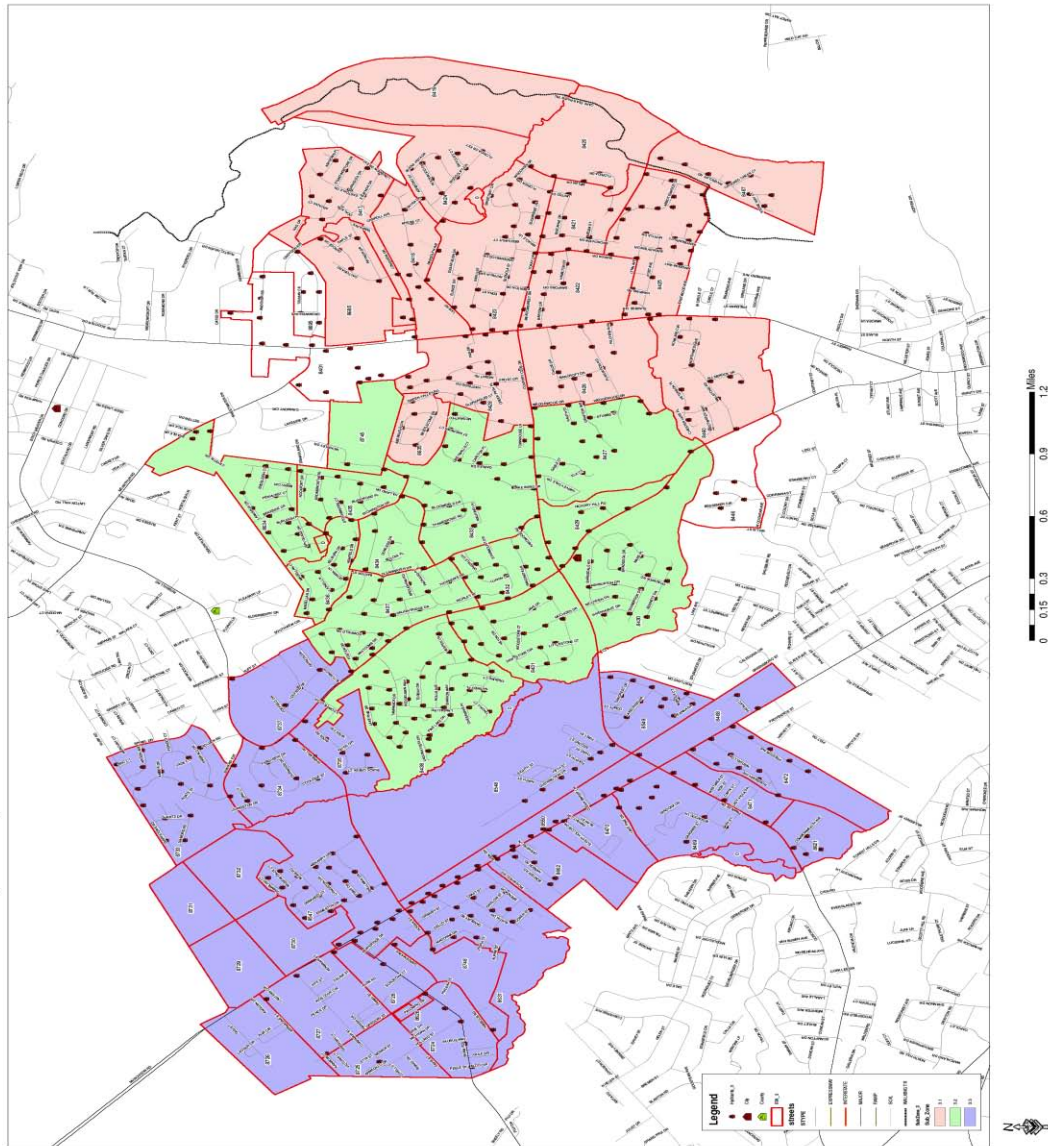
Construction Date- 1975 **Size –** 4970 square feet **Number of Bays-** 4

Located at 3225 Rosehill Road, Station 3 has a daily minimum staffing of six (6) personnel operating Engine 3 and Truck 3 out of this location.



Station 3 Response Area

City of Fayetteville Fire Stations and Zones - Zone 3





Station 3

Units



Engine 3







Truck 3



Station 3

Response District Description

District Location and Description

-  The response area for Station 3 is located in the Northern side of Cumberland County; the area is a mix of residential and commercial properties. This area is growing rapidly throughout with the major changes in the near future to the Ramsey Street and Murchison Road areas closest to boundaries of Fort Bragg. The construction of the I 295 corridors on the western end of the district and the privatizing of Fort Bragg will make Murchison Road one of the main entrances to the City of Fayetteville. The Cape Fear River runs along the far Eastern side on the District which has limited access points along its path.
-  Station 3 is bordered by Station 14 to the South, Station 7 to the North and Station 4 to the West. The Eastern side on the District is bordered by the Cape Fear River. Station 14's district starts at the Intersection of Eastwood Ave. and Ramsey Street on the Eastern side and Murchison Road at McLamb Drive on the South Western side. Station 7 picks up coverage at Golden Drive and Rosehill and also at Ramsey Street at the 3700 block. Station 4 covers the far Western side of the District at Pamalee Drive and Helen Street.
-  There are several main routes of travel that run through the district. One is Ramsey Street which runs North and South along the Eastern side of the District. This connects Downtown to the Northern part of Cumberland closest to Harnett County. Country Club Drive runs East and West and Splits the District. This roadway changes names 4 times along its route from Tokay Drive to Skibo Road. Murchison Road runs North and South along the Western side of the District and connects Downtown to the Fort Bragg limits.
-  The District has a two major Railroad Tracks, The first is the Norfolk Southern line travels North and South crossing Ramsey Street and running parallel to the Cape Fear River. This set of tracks blocks the River cliff Subdivision on the East side on the district in the event of a passing train. The Aberdeen & Rockfish tracks run northwest crossing through the campus of Fayetteville State University and continuing of to Fort Bragg. These tracks cross Country Club Drive at the 900 block. This is a guarded crossing with stop arms in both directions.



Critical Facilities and Public Buildings

There are several apartment complexes, rest homes, and multifamily dwellings that are located throughout the district. They range in sizes of being able to house several hundred people to multifamily dwellings that have from four to eight apartments per building. Listed below is a list of these complexes that are found throughout the FFD Station 3 response district.

- Tamarack Apartments
- Highland House Retirement Home
- Whispering Pines Retirement Home
- Pamalee Square
- Lake in the Pines Apartments
- Longview Apartments
- Tokay Garden Apartments
- The Enclaves Apartments
- J.D. Fuller Assisted Living
- Hickory Hill Assisted Living
- Rosemary Street Assisted Living

Cumberland County Schools Systems is the fourth largest school system in the state. Located within this district are three of the schools that make up this system. There are not any colleges or universities located in this district. Listed below are the names of the schools in this district.

- West-area Elementary School
- Lucile Souders Elementary School
- Reid Ross Classical School

There are three industrial complexes in the district. The names of these businesses are listed below.

- Motiva Enterprises: Large fuel farm for gasoline and butane
- Barnhill Construction: Large asphalt facility
- Dalton Gas Company: LP gas distribution

The Station 3 response area does not have any airports located within its assigned area. However, the Simmons airfield which is located on the Fort Bragg military reservation borders part of the response district. In the event of a major incident, the resources from station 3 will likely be utilized. Likewise, there are not any other major transportation hubs located within the district. There are trains that pass through the area on a daily basis that could pose a potential threat in the event of an emergency.



- The Station 3 response has only one location that is considered a hospital/care facility. This facility is a Dialysis Center that cares for several patients on a daily basis. The name of the facility is listed below.
 - Ramsey Street Dialysis Center

Water Supply

- There have been certain areas within the district that are restricted with the available amount of hydrants. There are four mobile home parks that do not have hydrants inside of the property. Any available water is established from the main road that is connected with the park. In addition, there is also an area that was incorporated into the response district that was previously protected by County Fire Station 10. This area of the district is limited to a total of five fire hydrants once away from the main thoroughfares.
- All water and hydrants that are located in this area are maintained by the Public Works Commission.
- There are a total number of 552 hydrants located within this district.

District-Specific Considerations

- There are some areas within the Station 3 response district that have been identified as limited accessibility. Listed below are the specified areas.
 - Incorporated County Station 10 area requires a travel distance of more the 4 miles. Causes problems with achieving Benchmark times.
 - Mobile home parks located at Wriston Dr. and Watershed Dr. have only one entrance. The entire MHP is surrounded by 6' chain link fence with barbed wire. Apparatus must back out completely to exit area.
 - Kenbrian Street – Overgrown trees restrict access.
 - Terry Hill Street – Single road with no room to turn apparatus around. Either have to back apparatus out onto Murchison Road or park in turn lane on Murchison Road.
- The following is a list of the mobile home parks located within the district. These locations have limited accessibility and water supply.
 - Sleepy Hollow Mobile Home Park
 - Harvey Dale Mobile Home Park
 - Whispering Pine Mobile Home Park
 - Boxwood Lane Mobile Home Park



Fire Station 4
406 Stamper Road
Child Safety Seat Permanent Check Station

Telephone –910/433-1734
FAX - 910/433-1140



Construction Date- 1960

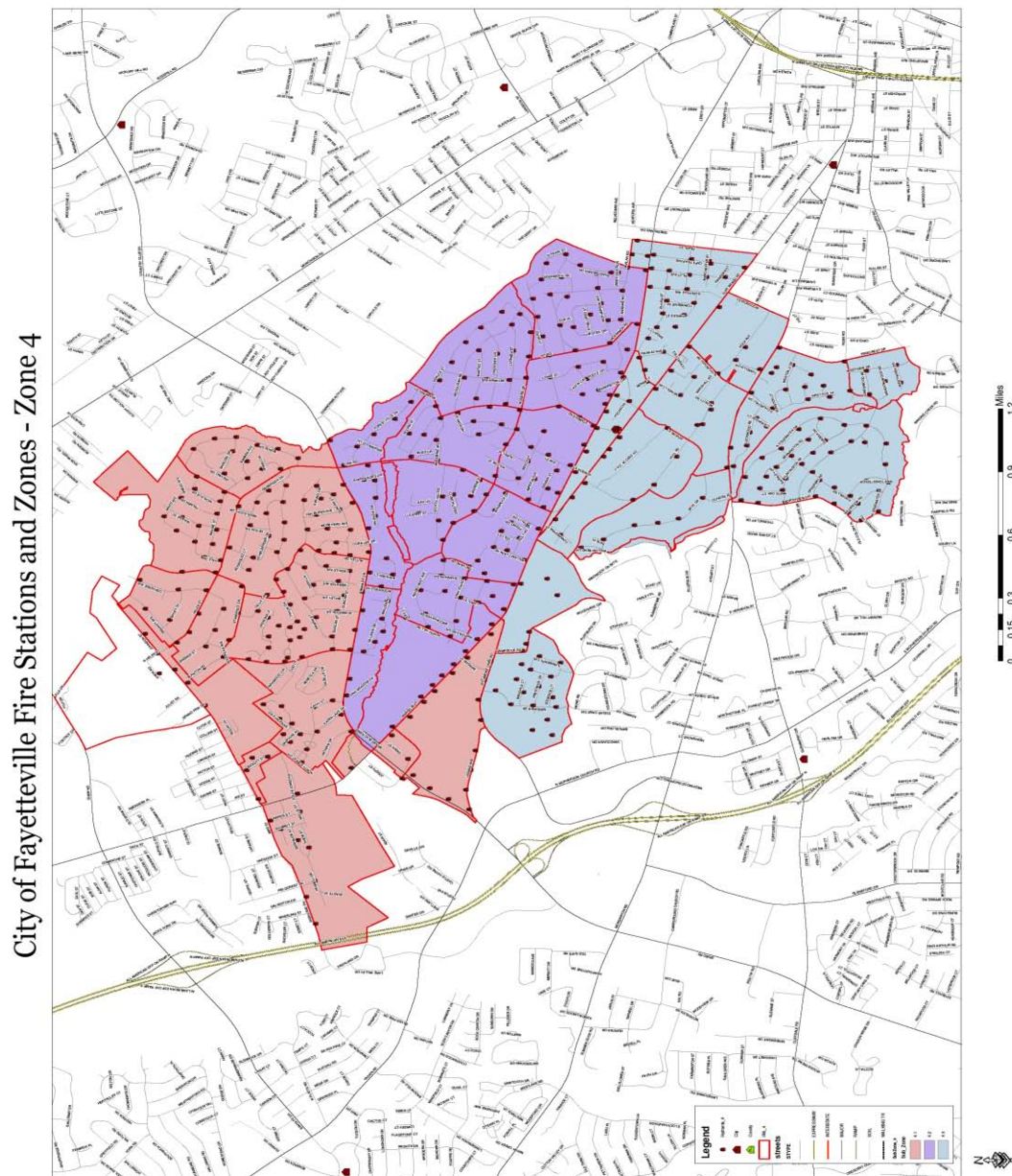
Size – 6120 square feet

Number of Bays-3

Located at 406 Stamper Road near Fayetteville Technical Community College, Station 4 has a daily minimum staffing 3 personnel operating Engine 4, Brush 4 and Boat 4 from this location.



Station 4 Response Area





Station 4

Units



Engine 4



Brush 4



Station 4

Units




Boat 4





Station 4

Response District Description


District Location and Description

 The Station 4 response district is centrally located in the City. The significance of this response district is that it protects the businesses and residential population that is located along one of the primary entrances to the Fort Bragg Military Reservation. The district has a mixture of both commercial and residential dwellings throughout. Many of the residential subdivisions are well established and contain a mixture of homes that range in age from thirty to fifty years old. It is because this area has served as one of the main entrances to Fort Bragg for so many years that some of the older Commercial buildings and businesses are located within this area. The accessibility from Fort Bragg makes it convenient when leaving post. Located within the district is Fayetteville Technical Community College. This being one of the largest community colleges in the state attracts a large daily influx of citizens to this area.

 Station 4 is bordered by Stations 2 and 6 to the South, Station 3 to the North, Stations 9 and 6 to the West, and Station 14 to the East. Station s 2 and 6 district share portions of Morganton Road at the Intersections of Pinecrest and Skye Drives respectively Station 6 also splits districts on Sycamore Dairy Road to the West as well as Station 9 splitting part of Bragg Boulevard towards Fort Bragg. The Northern portion of Station 4 covers the northern side of the district at Pamalee Drive and Helen Street. To the east, Pilot Avenue is the cut-off with Station 14.

 The major routes of travel within the district are Bragg Boulevard, Skibo Road, Pamalee Drive, Sycamore Dairy Road, Morganton Road and Fort Bragg Road. All of these roads sever as a dividing point between several districts within the City. Because of the number of major routes of travel in this district, providing assistance to neighboring district allows for timely responses.


Critical Facilities and Public Buildings

 There are several apartment complexes, rest homes, and multifamily dwellings that are located throughout the district. They range in sizes of being able to house several hundred people to multifamily dwellings that have from four to eight apartments per building. Listed below is a list of these complexes that are found throughout the FFD Station 4 response district.


- Wood Lea Apartments
- Karen Lakes Apartments
- Blanton Gardens Apartments
- King George Apartments




- Briarcliff Apartments
- Carriage Hills Apartments
- Galleria Apartments
- Eutaw Apartments
- Northumberland Apartments
- Morganton Arms Apartments
- The Velagio Apartments (currently under construction)
- Haymont Manor Retirement home


 The Station 4 response district has several educational facilities. These facilities include schools from the Cumberland County Schools System, Private Schools, and the College systems. Listed below are the schools that are located within this district.

- Terry Sanford High School – CCSS
- Alger D. Wilkins Elementary School – CCSS
- Vanstory Hills Elementary School – CCSS
- Fayetteville Technical Community College – NCCCS
- Troy State University – Satellite location
- Fayetteville Beauty College – Private Institution
- Corner Stone – Private School
- Haymount Methodist – Private School

 There is not any major transportation hub located in the Station 4 response district. However, with Bragg Boulevard serving as a primary entry point to Fort Bragg, military convoys often pass through the area. In the event of an emergency relating to a convoy, could cause major problems with traffic flow and the safety and security of by-standers.

 There are no hospitals located in this area; however the district does have one Urgent Care located at 1905 Bragg Boulevard and one rest home titled the Haymount Rehabilitation Center located at 2346 Barrington Circle.

Water Supply

 The Station 4 response district does not have any areas that are identified as having inadequate water supply. There are 475 established hydrant locations throughout the district. All of the hydrants in this area are serviced by the Public Works Commission.



District-Specific Considerations

There are some areas located throughout the district that have been identified as being limited access or areas of concern. The following is list of these areas that have been identified.

- FTCC Arts Center has limited access. There is a small trail leading to the facility off of Hull Road which an engine would not currently be able to access.
- Wood Lea Apartments located on Bragg Boulevard has a bridge separating the complex which is too small and not constructed properly for a fire apparatus to cross.
- A section of Mazarick Park's walking trail is in the Station 4 response district, but is not accessible by a vehicle from this district.
- The Baymont Inn is one of the largest buildings in the City. The business is ten stories tall with an electrical room located on the roof. Operations for this building will require a great deal of resources.
- B&B Bowling Alley, which is located on Fort Bragg road, is a large commercial structure with bowstring construction.

Identify areas of special concern

- **Bodies of water**
 - Kornbow Lake
 - Mintz Pond
 - Clark Pond
 - Glenville Lake
- **City Parks and recreation**
 - Roy Turner Park
 - Honeycutt Recreation Center
 - YMCA
 - Mazarick Park
- **Major Shopping Centers and Businesses**
 - Eutaw Shopping Center
 - Sycamore Dairy Road Plaza
 - Hornes Plaza
 - IT'Z Entertainment (Club/Nightlife)
 - Barcelona (Club/Nightlife)
 - Cadillac Ranch (Club/Nightlife)



Fire Station 5

3040 Boone Trail

Child Safety Seat Permanent Check Station

Telephone 910/433-1735

FAX - 910/433-1499



Construction Date- 2004

Size – 8400 square feet

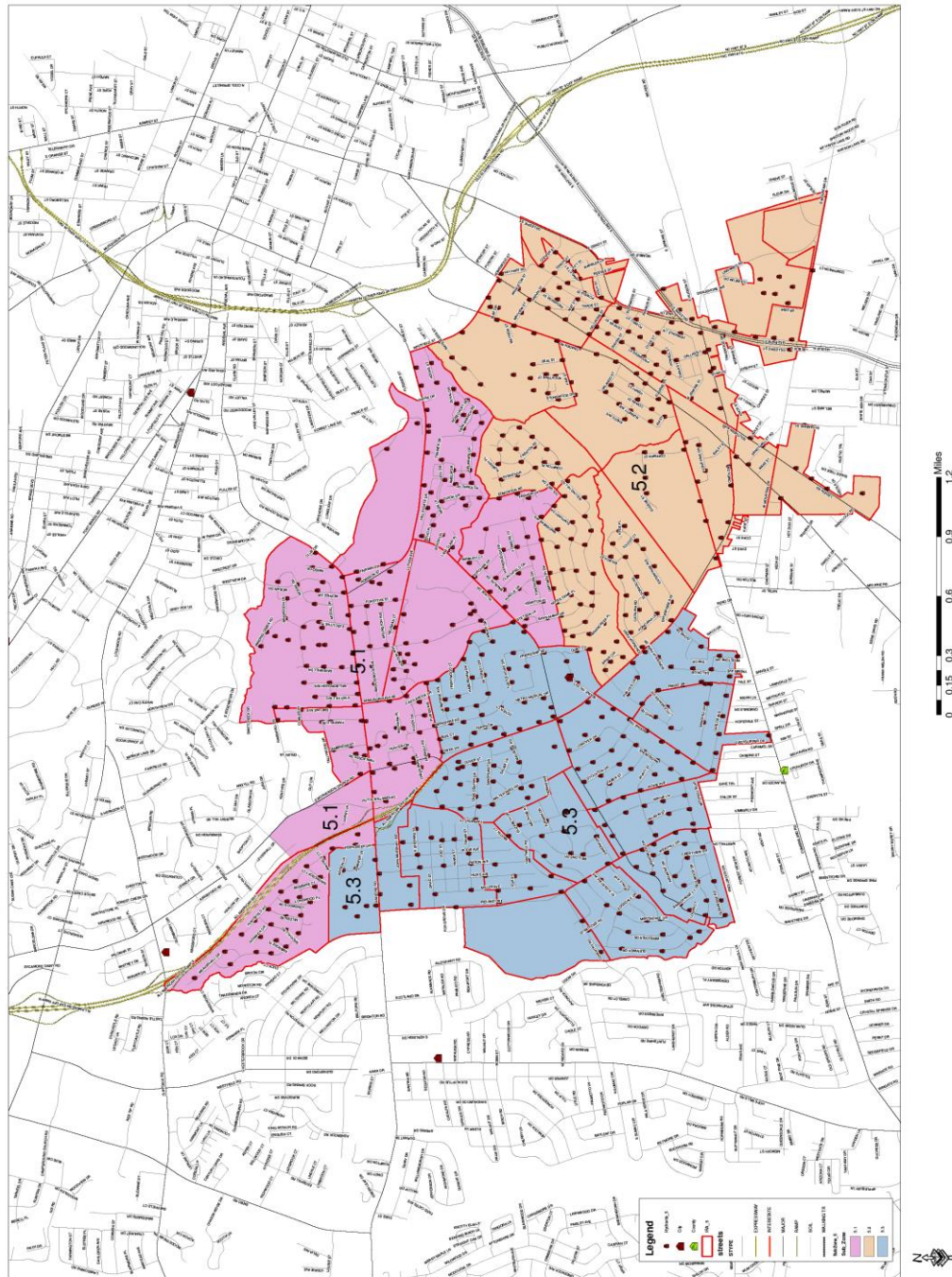
Number of Bays- 4

Located at 3040 Boone Trail near Cape Fear Valley Medical Center, Station 5 has a daily minimum staffing of 5 personnel operation Engine 5 and Squad 5 out of this location.



Station 5 Response Area

City of Fayetteville Fire Stations and Zones - Zone 5





Station 5

Units



Engine 5







Squad 5




Station 5

Response District Description

District Location and Description


-  The response area for Station 5 is located in the southern part of the city. This district has a heavy mix of commercial and residential properties. Our residential structures vary from mill houses left by old textile mills to some of the City's most lavish neighborhoods. Our mix of commercial properties varies just as much. Our commercial properties are a strong mix of new and old, small and large; from our county's only public hospital to the Fayetteville Regional Airport.
-  The Station 5 response district is bordered by Station 12 to the west, Stations 6 and 2 to the north and Station 1 to the east. The district is unique in the fact that it joins with two different county fire departments, both of which are contracted to respond to calls for service within the City limits. County Station 5, Cumberland Road Fire Department is located to the western portion of the district and County Station 3, Pearce's Mill Fire Department to the south and southeast.
-  The Station 5 response district has several major routes of travel running through it. Raeford Road, Village Drive and Cumberland Road travel our district from east to west. Owen Drive, Ireland Drive, Robeson Street, Gillespie Street, and US Highway 301 all travel our district from north to south.
-  There are two main sets of railroad tracks that cross through the district. The CSX railroad, which runs along Robeson Street and crosses Raeford Road at McPherson Church Road.

Critical Facilities and Public Buildings


-  There are twelve apartment complexes that are located throughout the district. In addition there are also other facilities such as rest homes and multifamily dwellings that are located in various places. They range in sizes of being able to house several hundred people to multifamily dwellings that have from four to eight apartments per building. Listed below is a list of these complexes that are found throughout the FFD Station 5 response district.
 - Value Place Apartments
 - Briarwood Arms Apts.
 - Colony Place Apts.
 - Fayetteville Gardens Apts
 - Georgetown Apts.




- Glendale Apts.
- Lake Clair Apts.
- Prestonwoods Condos
- Tallywood Arms Apts.
- Toledo Court Apts.
- Village Gate Apts.
- Winding Creek Apts.


 The Station 5 response district has several educational facilities. These facilities include schools from the Cumberland County Schools System and Private Schools. Listed below are the schools that are located within this district.

- Douglas Byrd High School (CCSS)
- Massey Hill Classical High School (CCSS)
- Howard Life and Sciences High School (CCSS)
- Douglas Byrd Middle School (CCSS)
- Ireland Drive Middle School (CCSS)
- Max Abbott Middle School (CCSS)
- Glendale Acres Elementary School (CCSS)
- Mary McArthur Elementary School (CCSS)
- Cumberland Road Elementary School (CCSS)
- Ashley Elementary School (CCSS)
- Fayetteville Christian School (CCSS)

 There is one major power sub-station located near the intersection of Owen Drive and Cumberland Road. This sub-station, which belongs to Progress Energy, is one of the main ones for this area.

 This is the County's only public hospital, along with many other health care facilities and doctor offices surrounding the facility. Cape Fear Valley Medical Center is the 9th largest health system in the state with 765 patient beds, serving a six-county region of Southeastern North Carolina and more than 935,000 patients annually. Cape Fear Valley Medical Center is located at the corner of Owen Drive and Village Drive.

Water Supply

 There are two areas that have been identified as having a limited number of hydrant availability within the district. Along Ireland Drive between Village Drive and Raeford Road have a limited number of hydrants. Gillespie Street from Martin Luther King Freeway to Trade Street has the same issue. It is important to note that the available water along these streets is sufficient for operations, but limited number of hydrants could result in long stretches of supply



line being used in the event of a fire. All other areas within the district have an adequate supply of hydrants and water.

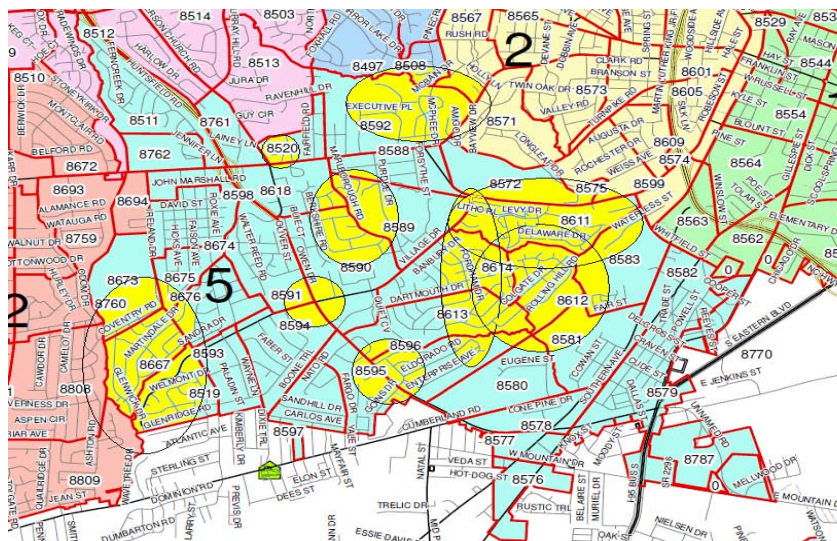
🚒 All hydrants and water mains in this area are maintained by the Public Works Commission.

🚒 There are a total of 495 hydrants established for this area.

District-Specific Considerations

- 🚒 There are areas that have been identified as having limited accessibility.
- Ferndale Lane – Dirt road with several residential structures.
 - Pine Lawn Court – Dirt road off Goins Drive with multiple structures
 - Waco Drive – Dirt road off Goins Drive with multiple structures. Has an alternate access from Redstone Drive for the squad units only.
 - Watson Lake Road – Dirt road off Owen Drive. Properties near Owen Drive are in the county, but there is a portion that is adjacent with the airport property which is within the city limits. Multiple residences are on this portion with no access for Engine Company's at all.

- 🚒 Identify areas of special concern
- Flood-prone areas
 - There are several areas within this district that are prone to flooding during flash thunderstorms. The map below indicates these locations within the district.





➤ Any additional areas of consideration

- The Crown Center is the crown jewel of Cumberland County. It boasts as its centerpiece the Crown Coliseum which has a capacity around 13,000. The Crown Coliseum can sell out for events such as wrestling and concerts. The Crown Center is located in a triangle of land marked by Owen Drive, Gillespie Street and East Mountain Drive.
- The Holiday Inn Bordeaux houses over 30,000 square feet of convention center space and 295 guest rooms. Holiday Inn Bordeaux is conveniently located directly beside Fire Station 5 at the corner of Owen Drive and Boone Trail



Fire Station 6
4439 Cliffdale Road

Telephone – 910/433-1736
FAX - 910/433-1141



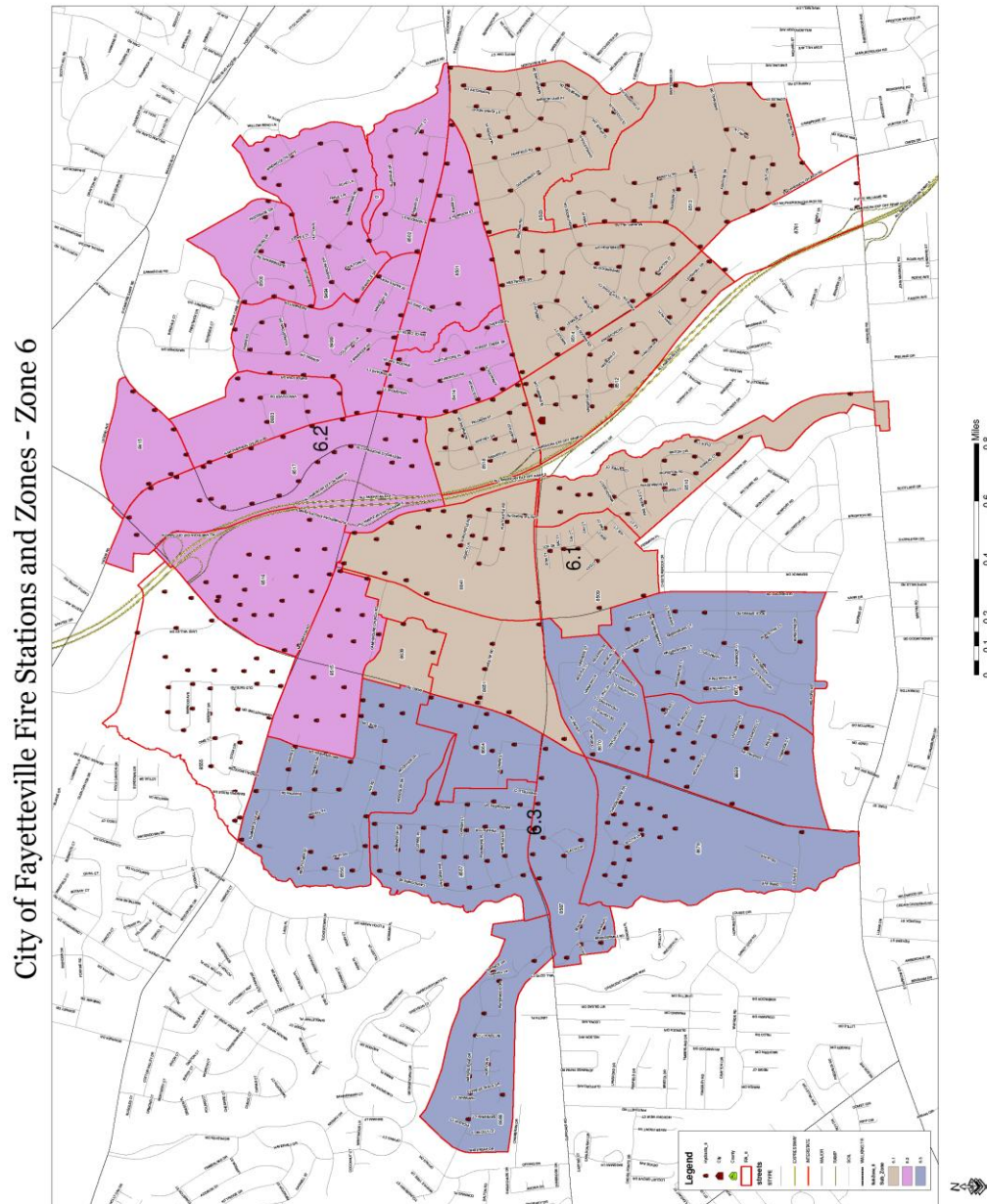
Construction Date- 1976

Size – 4970 square feet

Number of Bays- 4

Located at 4439 Cliffdale Road near Cross Creek Mall and the busy Skibo road area, Station 6 has a daily minimum staffing of 6 personnel operating Engine 6 and Truck 6 out of this location.

Station 6 Response Area





Station 6

Units



Engine 6







Truck 6



Station 6

Response District Description

District Location and Description

-  The primary response district of Engine 6 is comprised of both commercial and residential construction. Geographically, this district is located in the center of the City. The majority of the residential neighborhoods are located towards the border sections of the district. This district attracts a large influx of citizens on a daily basis. The businesses in this district serve as the main location for people who are shopping, dining or looking for entertainment. Within station 6's district is Cross Creek Mall, as well as Marketfair Mall. These are just two of the major malls, strip malls, and shopping centers in the district. There are two movie theaters in the response district as well. There is one Elementary school, two Middle schools, and three Private schools in the response district. There are two mobile home parks along with several hotels in this area. The residential areas consist of older established neighborhoods, to modern new apartment complexes. All these factors make this response district heavily congested with traffic.
-  The district is bordered by stations 4,5,9,8 and 12. Station 6 is bordered by Station 9 to the North, Station 8 to the West, Station 4 to the East, and Stations 5 and 12 to the South. The Northern portion of the district is dissected along Skibo road between Morganton and Yadkin Road. Cliffdale Road and Water's Edge Drive is the dividing point along the Western edge. The neighborhoods between Morganton Road and Sycamore Dairy Road are shared among Stations 4 and 6. To the South, Raeford Road is the cutoff for this end of the district. While Stations 5 and 12 are the primary units between Skibo Road and McPhee Drive, Station 6 provides coverage for the connecting neighborhoods that back up to Raeford Road.
-  Major roads that go through this district consist of, Skibo, Morganton, Cliffdale, McPherson Church, Sycamore Dairy, and the main gateway to Fort Bragg, the All American Expressway. Skibo road, which is also considered US Highway 401, is one of the busiest roads in the City of Fayetteville. This road runs through portions of station districts 6, 9, 4, and 3.
-  The only locations that have train routes throughout the district are along the border sections of the district. They are located at the border of Station 5 at South McPherson Church Road and at the border of Station 8 on Cliffdale Road. There are not any train routes that pass through the center portions of the district. These routes are maintained by the Aberdeen and Rockfish railways.



Critical Facilities and Public Buildings

There are several apartment complexes, and multifamily dwellings that are located throughout the district. They range in sizes of being able to house several hundred people to multifamily dwellings that have from four to eight apartments per building. Listed below is a list of these complexes that are found throughout the FFD Station 6 response district.

- Brittany Place Apartments
- Buckhead Apartments
- Cross Creek Cove Apartments and Townhomes
- Cambridge Arms Apartments
- Century Oaks Apartments
- Chason Ridge Apartments
- Cypress Trace Apartments
- Sterling Manor Condo's
- The Legacy at Cross Creek Apartments
- Three Colonies Apartments
- Windtree Garden Homes
- Woodstream Apartments
- Lakeshore Grande Apartments

In addition to these apartment complexes, this area has the most hotels than any other location throughout the City. Chains such as Hilton, Hampton Inn, Fairfield Inn, and Comfort Inn are located along Skibo Road. Many of these hotels house military soldiers and their families on a long term basis.




The Station 6 response district has several educational facilities. These facilities include schools from the Cumberland County Schools System and Private Schools. Listed below are the schools that are located within this district.

- Montclair Elementary (CCSS)
- Anne Chestnut Middle School (CCSS)
- Lewis Chapel Middle School (CCSS)
- Berean Baptist Academy (Private)
- Fayetteville Academy (CCSS)
- Village Christian Academy (CCSS)



There is not any hospital facility located within this response district. However, there are several small doctor offices that practice family medicine located throughout the district.



Water Supply

-  The Leisure Living Mobile Home Park is the only location in the Station 6 response area that has been identified as having inadequate water supply for fire ground operations. The only accessible hydrant for this mobile home park is located at the main entrance on Skibo Rd. In the event of a fire, the use of a water shuttle operation would have to be utilized. The numerous speed bumps through the neighborhood make response times longer as well.
-  The hydrants and water supply system for this district are serviced by the Public Works Commission.
-  There are a total of 508 hydrants located within this response district. There are no static draft points located in this response district.

District-Specific Considerations

-  There is one major body of water located within this district. Lake McFadyen poses potential for flooding and other water related emergencies that could require a significant amount of resources.
-  Station six has several major roads with high traffic that may cause a concern when having to deal with incidents. This is also a high profile area due to the main access to Fort Bragg and Cape Fear Valley running through it.



Fire Station 7

301 Stacy Weaver Drive

Child Safety Seat Permanent Check Station

Telephone – 910/433-1737

FAX - 910/433-1424



Construction Date- 1988

Size – 6036 square feet

Number of Bays- 3

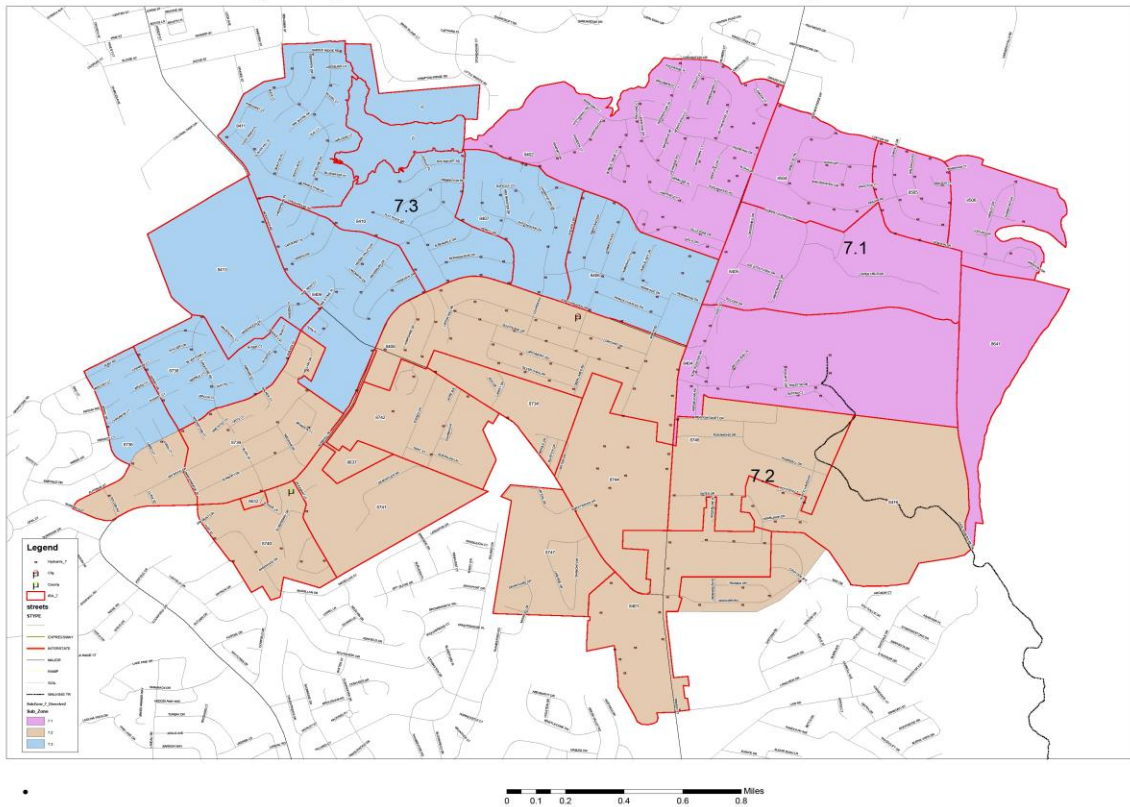
Located at 301 Stacey Weaver Drive near Methodist College and the Cape Fear River

Trail, Station 7 has a minimum daily staffing of 5 personnel operating Engine 7, Squad 7 and Boat 7 out of this location.



Station 7 Response Area

City of Fayetteville Fire Stations and Zones - Zone 7





Station 7

Units



Engine 7



Squad 7



Station 7

Units



Brush 7



Boat 7



Station 7

Units







ATV 7




Station 7

Response District Description

District Location and Description


-  Built in 1988, Fire Station 7 serves the residents and businesses in the northern area of the City of Fayetteville. There are 6 assigned units that handle emergency situations in the response district. The response district is predominately a residential district with the majority of the business/commercial facilities being located on Ramsey Street. Until 2009, the Station 7 response district was located at the northern most portion of the City of Fayetteville. Much of the district was a part of the County. However, because of annexation, the majority of the response district is now in the city limits. Small sections of Rosehill and McArthur roads are still considered county where Station 7 provides initial coverage.
-  The Station 7 response district is in the northern part of the city with Station 19's district to the north and Station 3 to the south and south west. A small area of the western portion is bordered by the boundaries of the Fort Bragg Military Reservation. This portion of the military base is an undeveloped woodland portion of the base. To the east of the district, is the Cape Fear River. The Cape Fear River Trail, which continues down to the Station 1 response district, is the furthestmost area within the response district.
-  The major routes of travel include: Ramsey Street, Stacy Weaver, Rosehill Road, and McArthur Road. Ramsey Street is a six lane heavily traveled street that see high congestion during all hour of the day. This road is also considered a portion of US Highway 401. McArthur Road serves as a main artery to Fort Bragg for many people on a daily basis.
-  The Norfolk Southern Railway runs through the district near the Cape Fear River Trail.

Critical Facilities and Public Buildings


-  There are many apartment complexes in the district. Most of the apartment complexes in this district are located on Ramsey Street. They range from single story row apartments to three story apartment complexes. Many of these buildings are monitored by fire protection systems while some are not due to the age of the buildings. Some of the other complexes are located near Rosehill Road and McArthur Road. The following is a list of these complexes.
 - Cumberland Trace Apartments
 - College Arms Apartments
 - Guest Inn
 - Cobblestone Apartments




- Tamarind Place Apartments
- Tartan Plan Apartments
- Tallstone Apartments
- The Heights at McArthur Park
- Landmark Villas
- Northview Villas


 The Station 7 response district has several educational facilities. These facilities include schools from the Cumberland County Schools System, Private Schools, and the College systems. Listed below are the schools that are located within this district.


- Methodist University
- College Lake Elementary School (CCSS)
- Northwood Temple Academy (Private)

 There is one facility located within the response district that can be classified as a hazardous materials facility. Bobby Taylor Oil Company, located at 4501 Ramsey Street is a major supplier of petroleum based products throughout Cumberland County and surrounding areas.

 There are no hospitals located in this area; however the district does have one assisted living facility located at 231 Treetop Drive.


Water Supply

 Water within the district is supplied by the Public Works Commission. Water supply within the district is sufficient for the occupancies within. There are a total of 359 hydrants located within the district.

 River, Lakes, Streams: The Cape Fear River borders the east side of our district. There is a large lake located along McArthur Rd near Setter Drive and another on the River Trail. Five small ponds; one located on Crystal Dr. and two at the start of the River Trail near Meadowcroft Drive, one behind the homes on Andover Road near the intersection of Croydon Ave. Also one off Newburgh Drive.

 Station 7's response district includes numerous small streams and ponds.




District-Specific Considerations

 Apparatus access to some apartment complexes are by Knox Box key. It is not unusual to find cars parked in a manner that makes it difficult for emergency vehicles to respond within some apartment complexes.



Fayetteville Fire/Emergency Management

Standard of Coverage

-  Access to the golf pro shop at Methodist University has limited access and water supply would be difficult.
-  Numerous churches, Temples and places of worship can be found throughout the district. These occupancies range from small one room buildings up to large complexes.
-  **Parks:** College Lakes Park, College Lakes Recreation Center and Jordan Soccer Complex



Fire Station 8
1116 Seventy First School Road

Telephone – 910/433-1408
FAX - 910/433-1418



Construction Date- 2000

Size – 6747 square feet

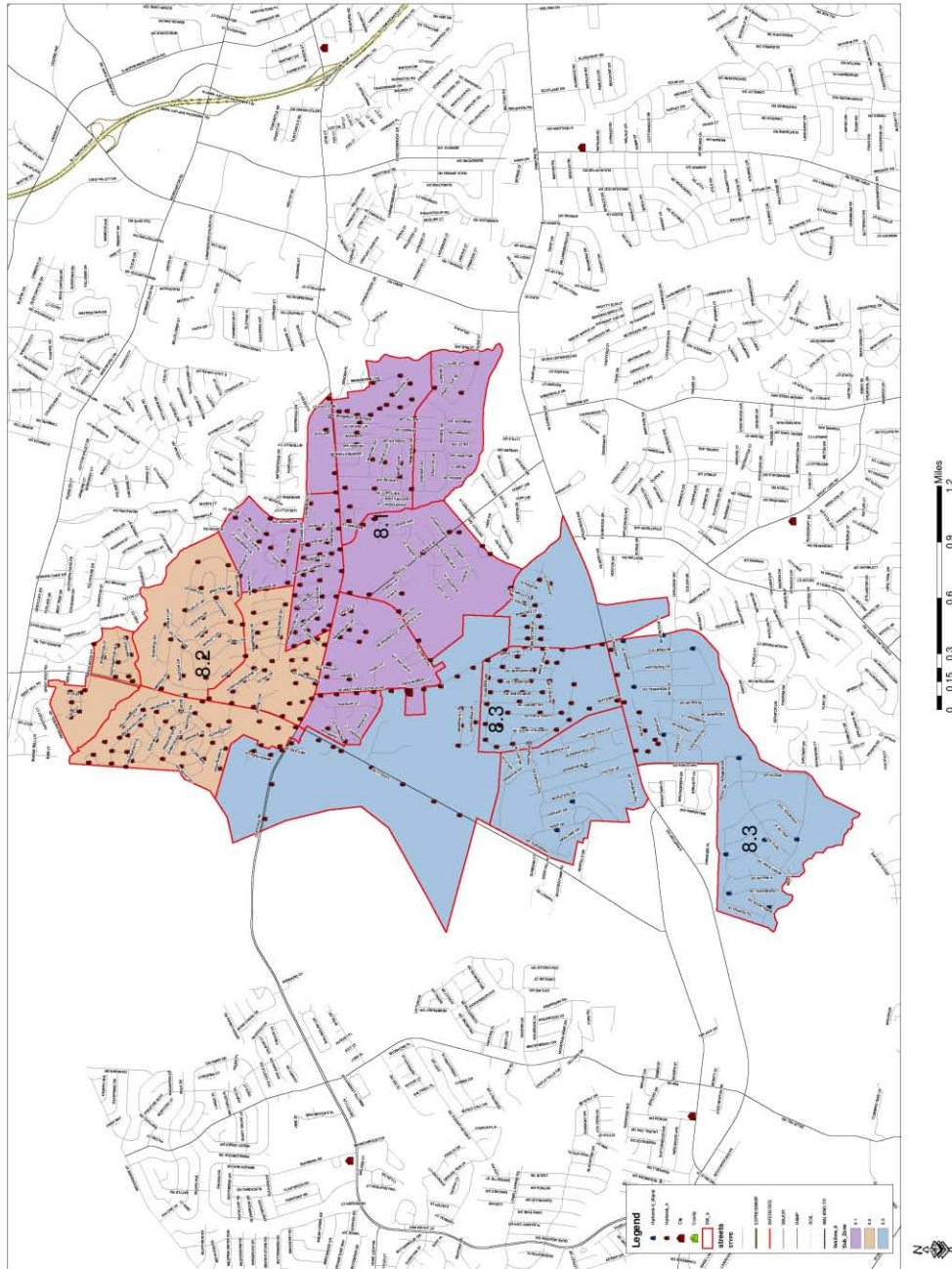
Number of Bays- 4

Located 1116 Seventy First School Road, near Seventy First High School, Station 8 has a daily minimum staffing of 5 personnel operating Engine 8 and Rescue 8, one of the City's two Heavy Rescue Companies, out of this location.



Station 8 Response Area

City of Fayetteville Fire Stations and Zones - Zone 8





Station 8

Units



Engine 8







Rescue 8




Station 8

Response District Description

District Location and Description

-  The Station 8 district is located on the western side of Fayetteville in Battalion 3. The equipment assigned to this station consists of one pumper and one heavy rescue truck. There are a total of 6 personnel assigned to the station and a minimum staffing of 5 personnel. The district is one of the most heavily populated for people living in apartment complexes. There are a total of 15 apartment complexes and one hotel that are located in this area. Most of the retail businesses are located in strip malls and stand alone stores located along the Cliffdale and Reilly Road areas. There are several small restaurants and fast food establishments as well. This area sees high volumes of traffic during the morning and late afternoon hours. Many of the people who live in Hoke and Moore Counties travel through this area on their commutes to and from work. The Reilly Road entrance to Fort Bragg is used for those who work on Post as well. There is a small amount of farmland located within this district. It is located across from the industrial park on South Reilly Road. It is highly likely that as the district continues to grow, this area will transition into an additional residential and/or commercial area.
-  The Station 8 response district is bordered by the Station 11 and 15 response district to the west. To the east, the district extends down Cliffdale Road until it reaches Brandermill Road. The district stretches to Lexi Lane on Reilly Road where the Station 9 response district borders to the North and to the South along Raedord Road is the border of the Station 17 response district.
-  The major routes of travel that run through this district are Raeford Road (US Highway 401), Cliffdale Road, and Reilly Road. Reilly Road serves as one of the main entrances to Fort Bragg.
-  There is one train route that follows Reilly Road until it reaches Cliffdale Road and turns right following Cliffdale Road.


Critical Facilities and Public Buildings


-  There are 15 apartment complexes and one hotel that are located throughout the district. Many of these have several separate buildings located within the cluster of apartments. Listed below is a list of the apartments located within the district.

- Barton Landing Apartments
- Brookstone Apartments




- Carlson Bay Apartments
- Hidden Creek Apartments
- Eagle Point Apartments
- Highlander Apartments
- Stewarts Creek Apartments
- Regency Apartments
- Village at Cliffdale Apartments
- Crescent Commons Apartments
- Landfall Condos
- Reserve at Carrington Place Apartments
- Summertime Apartments
- Waters Edge Townhouses
- Austin Creek Apartments
- Value Place Hotel





 There are two 24 hour extended care facilities located on Seventy First School Road.

 There are 4 schools that are located in the Station 8 response district. They are all public schools that range from elementary to high school. All of the schools are located next door to each other on Raeford Road with the exception of Cliffdale Elementary. Listed below is a list of the schools located in this district

- Cliffdale Elementary
- William H. Owen Elementary
- 71st Classical Middle School
- 71st High School

 PWC has a million gallon water storage facility located on Seventy First School Road next to the fire department.

Water Supply

-  The areas water supply is serviced by both PWC and Brookwood.
-  There are a total of 328 hydrants in our response district.
-  Reilly Road Industrial Park has one hydrant located 200' from the park entrance on the opposite side of Reilly Rd. There are no hydrants located inside of the industrial park.
-  Rayconda Subdivision has very limited municipal water supply access. Tanker shuttle will be primary strategies for this area. This area has two areas possible for static draft water points.



District-Specific Considerations

- Access Problems: Majority of the apartment complexes located in this district is gated and there will be a delay using the Knox box key to open the gates.
- Wayland Dr has two separate entrances but does not connect all the way through.
- Offing Dr has two separate entrances but is split in two because of Railroad track that block the street.
- Northumberland Dr has two separate entrances but has a metal fence that blocks access from both ends.
- Industrial Plants: Reilly Road Industrial Park located on Reilly Road. There are also two concrete businesses, Fay Block, South Eastern Concrete Company located on Reilly Road.
- Flooding Problems:
 - Wayland Drive and Cliffdale Road between Bartons Landing
 - Regency Apartments flood with excessive amounts of rain.
- Major Gas lines:
 - There is a Reduction/Transfer station located next to Cliffdale Elementary School.
 - Major gas lines run alongside Cliffdale Road and Raeford Road
- Parks:
 - Cliffdale Recreation Center
 - Glenn Reilly Park
 - Hollywood Heights Park
 - John Fuller Recreation Center



Fire Station 9

5091 Santa Fe Drive

Child Safety Seat Permanent Check Station

Telephone – 910/433-1439

FAX - 910/433-1151



Construction Date- 1976

Size – 7613 square feet

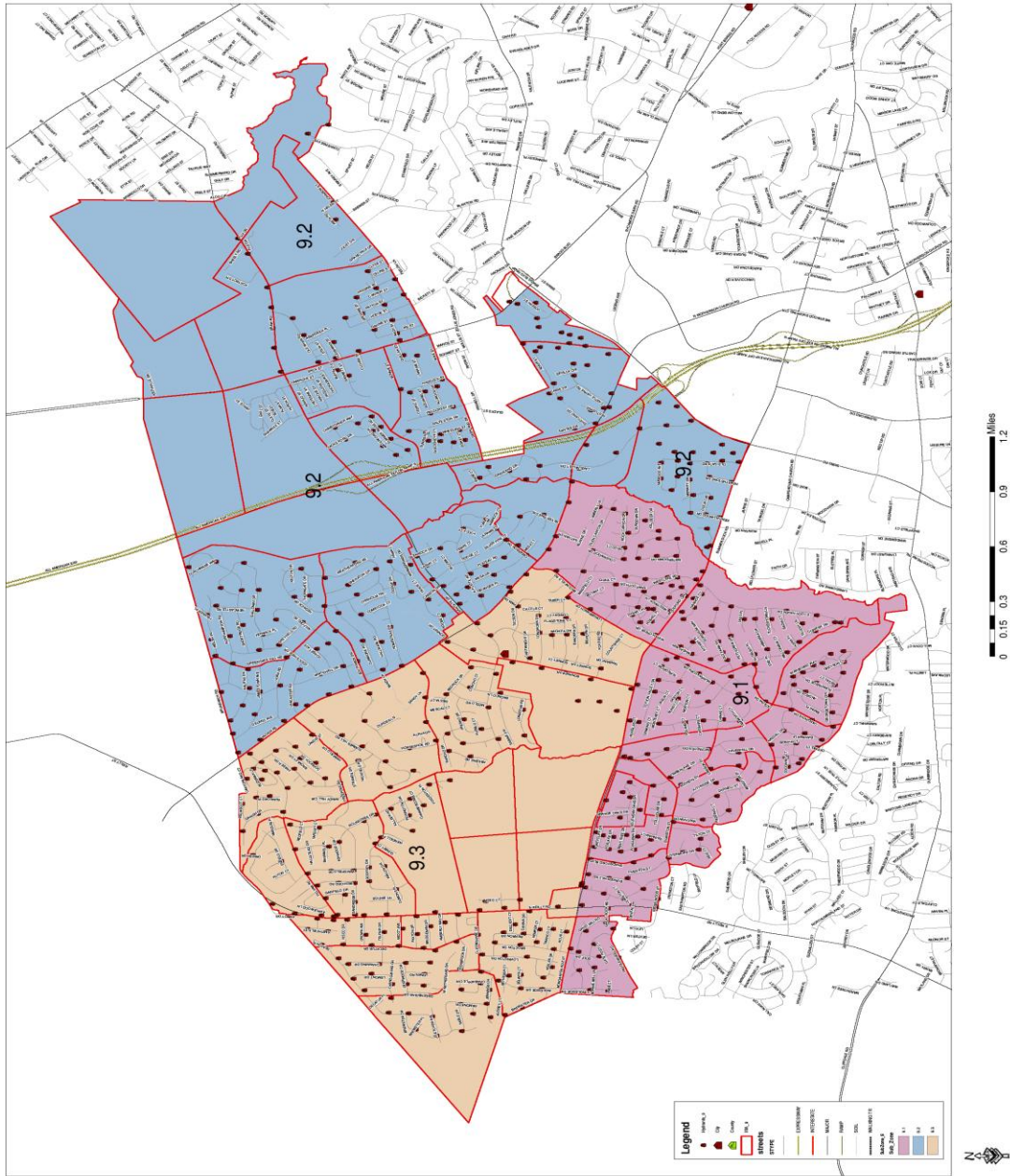
Number of Bays- 6

Located at 5091 Santa Fe Drive, near the Yadkin and Riley Road's Gates to Fort Bragg, Station 9 is the headquarters of Battalion 2, with a daily minimum staffing of 6 personnel operating Engine 9 and Truck 9 from this location. Home of the busiest Engine Company in the City, the facility also houses the Offices of the Fayetteville Police Department's Cross Creek Division.



Station 9 Response Area

City of Fayetteville Fire Stations and Zones - Zone 9





Station 9

Units



Engine 9



Truck 9



Station 9

Units







Battalion 2




Station 9

Response District Description

District Location and Description

-  Station 9 serves the northwestern portion of the City of Fayetteville. It houses E9, T9, Reserve E23, BC2 and a light plant. The daily staffing for the station is 8 assigned with a minimum level of 6 personnel. Station 9 handles hose repairs for the Department and houses a fixed air compressor for filling SCBA bottles. The Station 9 response district is a mix of commercial occupancies, numerous residential areas, several apartment complexes and mobile home parks. A large portion of the annual calls for this district occur in what is referred to as the Bonnie Doone community which is predominately made up of low income housing. This area is also considered to have a high crime rate within the City.
-  Fire station 9's district is bordered on the north and west by Fort Bragg and the response districts of FB E51 and E11. In the East station 9 is bordered by E3's response district with the border being the Shaw Height neighborhood. Station 9 shares its southern border with the response districts of E4, E6, and E8. The border follows Johnson St, Mike St, Skibo Rd and a line that travels approximately half the distance between Morganton Rd and Cliffdale Rd all the way to the Ft Bragg boundary in the west.
-  Station 9's district has several major routes of travel running through it. The All-American Freeway, Yadkin Road, Bragg Blvd and Reilly Road are a major travel routes for people traveling to and from Fort Bragg. Skibo Road and Morganton Road is a major thoroughfare for people going to shopping centers.
-  There are not any train routes that operate through the Station 9 response district.


Critical Facilities and Public Buildings

-  This area is one of the mostly densely populated locations within the City of Fayetteville for apartment complexes. There are 22 large apartment complexes in the response district with more being built due to BRAC. Several smaller ones that house between two and four families are located throughout the district as well. These smaller structures do not typically require the additional resources as the larger complexes. Listed below is a list of the current complexes in this area.
 - Applewood Apartments
 - The Crossing at Morganton
 - Family Lodge (Crabapple Circle)




- Family Lodge (Cliffbourne Drive)
- Family Lodge Townhomes (Ingleside Drive)
- Grande Oaks Apartments
- Jamestown Commons Apartments
- Kensington Court Apartments
- Kings Cross Apartments
- Kings Point Apartments
- Lands End Apartments
- Liberty Square Apartments
- Morganton Crest Apartments
- Ponderosa Apartments
- Stoneridge Apartments
- Windyhill Apartments
- Westlake at Morganton Apartments
- Mark I Apartments
- Fieldcrest Apartments
- Cottonade Square Apartments
- Harbour Point Apartments
- Lakeshore Harbor Condos

 Station 9 is shared with the Cross Creek precinct of the Fayetteville Police Department.

 The education facilities located within this district are all a part of the Cumberland County Schools System. Listed below is a list of the schools in the district.

- Ponderosa Elementary School
- Westover High School
- Westover Middle School
- Morganton Road Elementary
- Ben Martin Elementary School

Water Supply

 Station 9's district has a total of 615 hydrants supplied by PWC water. The major water supply problems in station 9's district would be the lack of hydrants on Bragg Boulevard from Shaw Road all the way to Fort Bragg, also there is a hydrant blocked by guard rails on Yadkin Road near Lake Valley, across from Wilco Hess. Other than these issues there are adequate hydrants disbursed throughout the district at regular intervals. There are no water treatment sites located within the area.



District-Specific Considerations

- With Station 9's district being so large there are several areas of limited access. These roads are rough dirt roads that have little to no accessible area to turn apparatus around. The identified locations are:
 - Foxtrot Road off of Shaw Road
 - Sheely Drive off of Shaw Road
 - Sandy Lane off of Horseshoe Road
 - Durden Lane off of Horseshoe Road
 - Nathan Drive off of Yadkin Road
 - Blayne Drive off of Yadkin Road

- Of the many Lakes and streams that may be found within the district, the ones that would cause concerns with regards to flooding are listed below.
 - Santa Fe Road and Carson Drive
 - The creek under Morganton Road near McFadyen Drive
 - McFadyen Lake
 - The PWC water shed located off Shaw Road



Fire Station 10
3059 Control Tower Road

Telephone – 910/433-1408
FAX - 910/433-1624



Construction Date- 1968

Size – 4000 square feet

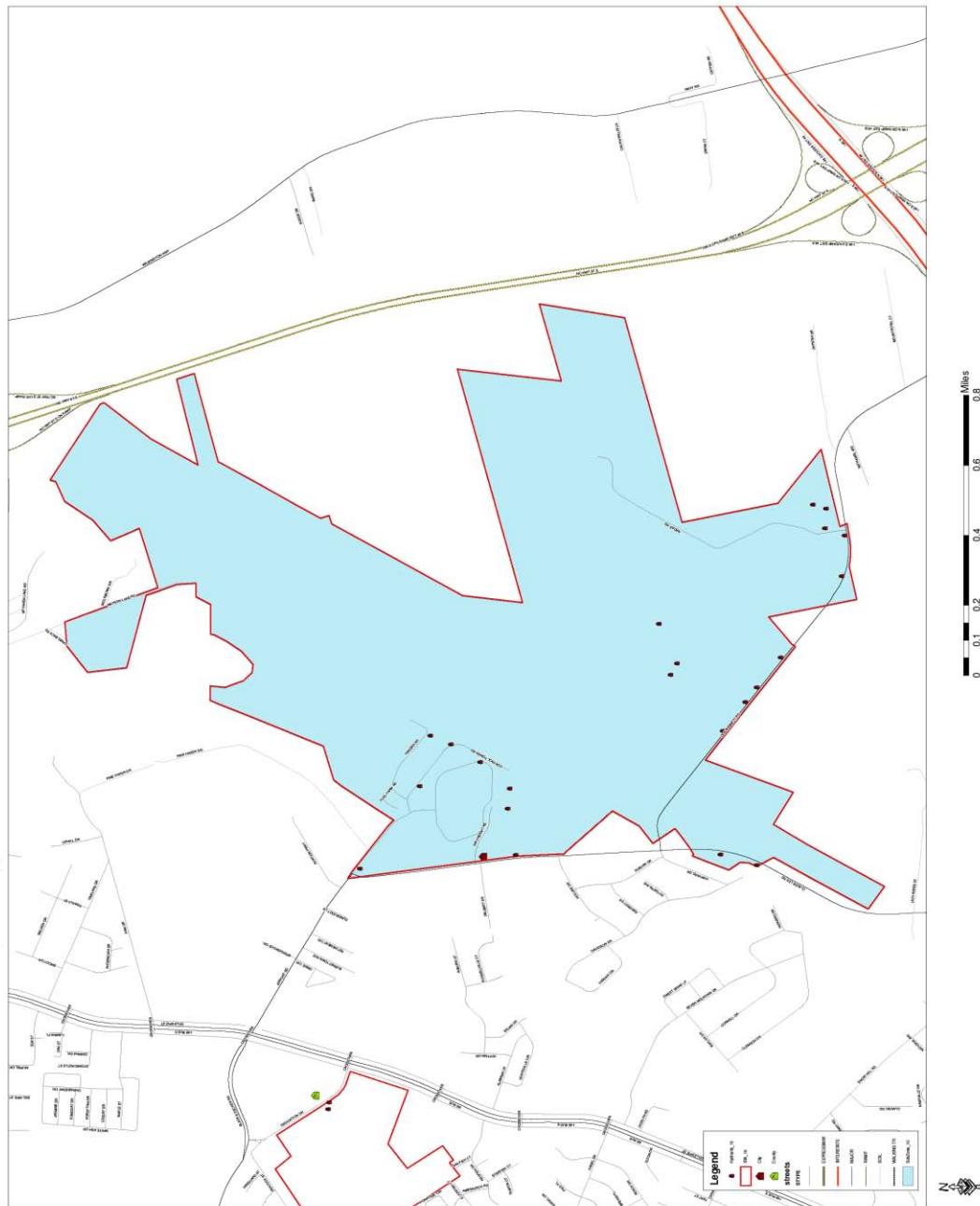
Number of Bays- 2

Located at the Fayetteville Regional Airport, Station 10 has a daily minimum staffing of 2 personnel operating 2 Crash Trucks from that location.



Station 10 Response Area

City of Fayetteville Fire Stations and Zones - Zone 10





Station 10

Units



Safety 2



Safety 3



Station 10

Response District Description

The primary response area for Station 10 is limited to the Fayetteville Regional Airport property. This area includes the airport terminal buildings, aircraft hangers, aircraft fuel distribution depot, and several building housing private businesses related to military contractors or air travel. Additionally, the Fayetteville Regional Fire Training Facility is located on the property.

The units assigned to the station are Crash Fire / Rescue vehicles designed specifically for aircraft incidents. The primary response force for structural fires, vehicle fires or brush / grass fire incidents on the property comes from Station 5 with Engine 5 assigned as the first due unit, and additional resources from Station 1 and County Station 3. Medical incidents are handled by the 2 personnel assigned to the Station as well as the response of a Squad from Station 5.



Fire Station 11

7690 Raeford Road

Child Safety Seat Permanent Check Station

Telephone – 910/867-1369

FAX - 910/867-2946



Construction Date- 1992

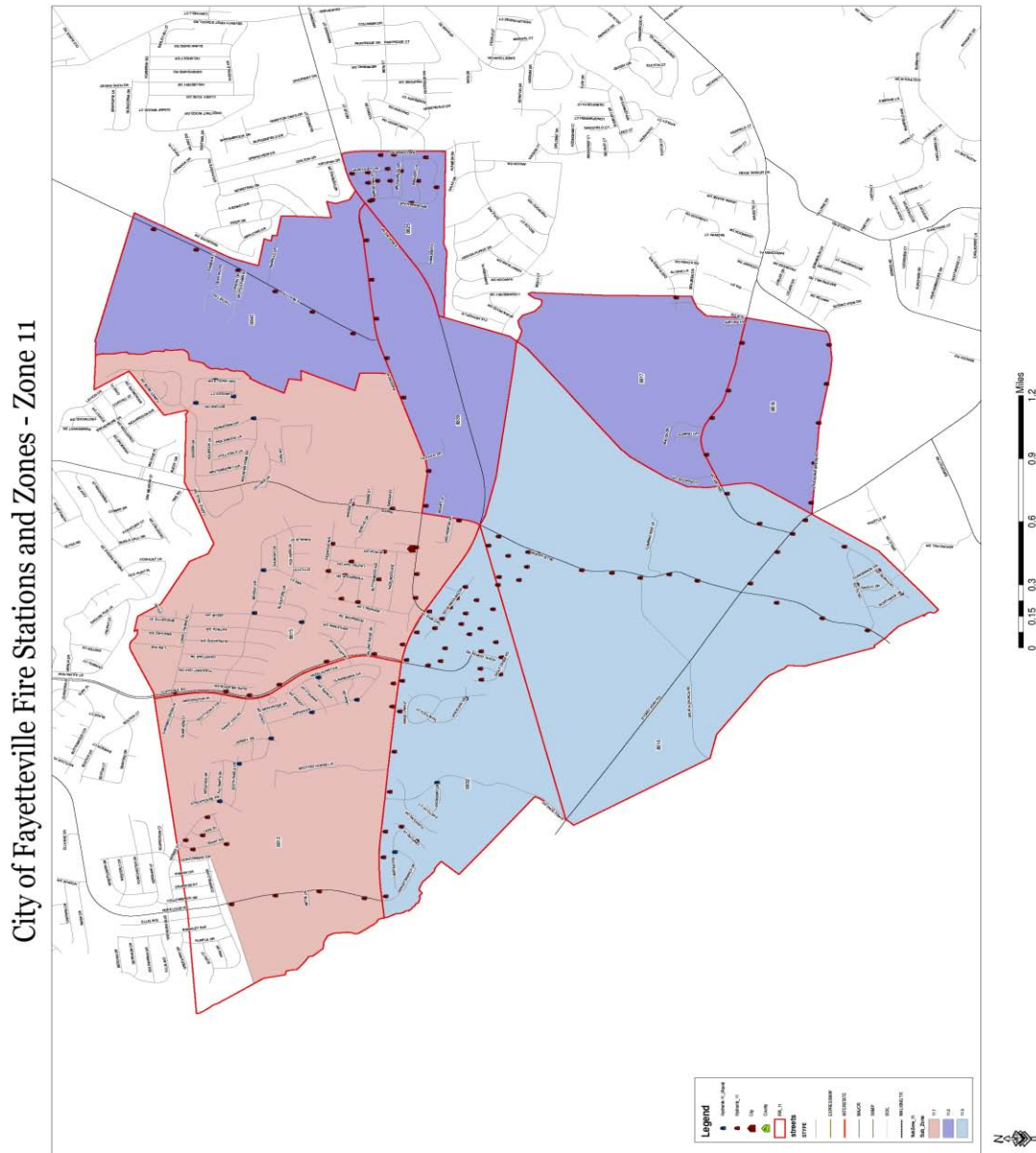
Size – 13320 square feet

Number of Bays- 8

Located at 7690 Raeford Road near Lake Rim, Station 11 has a daily minimum staffing of 6 personnel operating Engine 11, Truck 11 and Boat 11 out of this location. A joint County / City Collapse Search and Rescue Team (CSAR) are based out of Station 11 and all associated equipment is housed at this location.



Station 11 Response Area





Station 11

Units



Engine 11



Truck 11



Station 11

Units



Collapse Search and Rescue Units



Station 11

Units







Collapse Search and Rescue Support Vehicles



Station 11

Response District Description

District Location and Description

-  The primary response district for Station 11 consists of the western portion of Cumberland County. What was once mostly rural farm land is growing rapidly with the influx of additional military personnel. Residential structure inventories include, new construction, old farm homes, group homes, duplexes and a multiple unit apartment complex. Numerous churches, group homes and places of worship can be found throughout the district. These occupancies range from small one room building to large structures, such as Walmart, Lowes, Foodlion and a four story office building on Bentrige Dr. BRACC, or Base Realignment and Closure Commission, is responsible for moving **FORSCOM** (US Army Forces Command Headquarters) and **USARC** (United States Army Reserve Command) to Ft. Bragg. FORSCOM/USARC manages more than \$30 Billion of the annual Department of Defense budget. Total expected growth for the region is an additional 45,000 personnel. This has caused rapid growth in western Cumberland County.
-  The entire western boarder of the district is Hoke County. Most of the northern boarder is Station 15's district with the exception of the area east of S. Reilly Rd which is Station 8's district. The eastern boundry is Station 8's district. Station 8's district runs from this northeastern corner down the eastern boundry of Station 11's district to Strickland Brigde Rd. South of Strickland Bridge Rd. Stoney Point Fire Department's district makes up the southeastern and southern boundry of the Station 11 response district.
-  Station 11's district has several major routes of travel running through it. Raeford Rd runs east and west through the district and divides it north and south. Gillis Hill Rd runs north from Hoke County to Old Raeford Rd where it changes name to Rim Rd. This road divides the district east and west.
-  The Aberdeen Rockfish Railroad runs north and south through the district parallel to S. Reilly Rd., across both sections of Raeford Rd., Century Circle, Strickland Bridge Rd., and finally dividing Gaelic Dr in half. The eastern section of Gaelic Dr, as divided by the railroad tracks, is in Stoney Point's fire district. The Aberdeen Rockfish Railroad bridge over Raeford Road has a clearance of 13'2".



Critical Facilities and Public Buildings

- There is only one location within the Station 11 response district that has any apartment complexes. Within this area, there are two phase to the neighborhood. The apartment buildings and the townhomes. Listed below are the names of these two portions of the complex.
 - Woodland Village (Apartments)
 - Woodland Villa (Townhomes)
- Westin Shopping Centre is a major commercial area located in Station 11's district. Access to the front of Westin Shopping Centre can be difficult depending on the time of day, traffic congestion can be a problem.
- Station 11's district currently includes one elementary school. There are an additional two other schools that are currently under construction. Listed below are the schools within the response district.
 - New Century International Elementary School (CCSS)
 - New Century International Middle School (Under Construction)
 - New Century International High School (Under Construction)

Water Supply

- Water supply in the district is supplied by PWC and Aqua water companies. Due to the recent economic expansion in the district, most of the hydrants are located in the commercial areas and the recently constructed neighborhoods. There are some older neighborhoods that lack hydrant coverage such as the areas off of Beverly Dr., Mountain Home Dr., Lowell Harris Dr. and Castle Falls Dr.
- Engine 11's district contains 177 hydrants, divided into three separate hydrant zones. Lake Rim could be used as a static water source.

District-Specific Considerations

- Station 11's district also has several areas with limited access for fire department vehicles. These areas have some of the oldest homes in the district and constitute an increased risk to their occupants due to age of the structures, limited access and lack of hydrants in these areas. Listed below is a list of the areas that have been identified as having limited access.
 - Deer Hill, Spotted Fawn, and Thicket Road
 1. This area is complicated by long hose lays and a single hydrant located on S. Reilly Rd. Spotted Fawn Rd, Deer



Hill and Thicket Road are dirt roads that are very sandy during dry times and can contain large (and sometimes deep) puddles during extended wet weather. Narrow roads and curves make it impossible to navigate to the ends of the roads.

- Cosgrove Dr., Domino Dr., and Macon Dr.
 - This area is now complicated by New Century International Elementary School and Westside Public Library which have been constructed across the street in the field at the bottom of this picture. Traffic during school hours will hamper the already limited access. Future plans for this area include a middle school and a high school located beside New Century Elementary School. The availability of water is an issue for the residences in this area as well. Several of the houses are in excess of a 1000 feet of a fire hydrant.
- Jericho Drive and Maggie Circle
 - These roads are very sandy and are limited in the width. These conditions make it extremely difficult for engines to navigate them. There is also a long section towards the end of Jericho Drive that is not accessible by fire engine at all.
- Fork Road
 - The Fork Road area has several limited access problems. A sandy dirt road that has locked gates, low hanging limbs, a section that can't be accessed, and a section that can only be accessed by four wheeled drive brush units are the identified problems for this road. The closest hydrant is located at 949 Kennshaw Dr. off of Mountain Home Dr. This hydrant is 720 feet from the rear section of Fork Rd. at Jesus Preach Frewill Baptist Church.
- Spotted Horse Lane
 - This limited access area is a sandy dirt road that is narrow but accessible. However, water supply is a problem. The last residence is 2960 feet from Raeford Road and the closest hydrant is an additional 530 feet away on the far side of Raeford Road.



Identify areas of special concern

- The district is home to Lake Rim, a 5 acre lake used for fishing, boating (no motors), and kayak tours run by Lake Rim Park which is located across the street. Lake Rim Park offers walking trails,



soccer fields, football fields, tennis courts, baseball fields, covered picnic areas, and nature tours. John E. Pechmen Fishing Education Center is also located across from Lake Rim at the Lake Rim Fish Hatchery. The Lake Rim Fish Hatchery has seven ponds where they raise cat fish, trout, and bass. The Lake Rim Fish Hatchery hosts several fishing events each year for various groups ranging from special needs children, high/middle school children, as well as, mother/daughter fishing days and father/son fishing days.



Fire Station 12

307 Hope Mills Road

Child Safety Seat Permanent Check Station

Telephone – 910/433-1008

FAX - 910/423-0491



Construction Date- 1956

Size – 6747 square feet

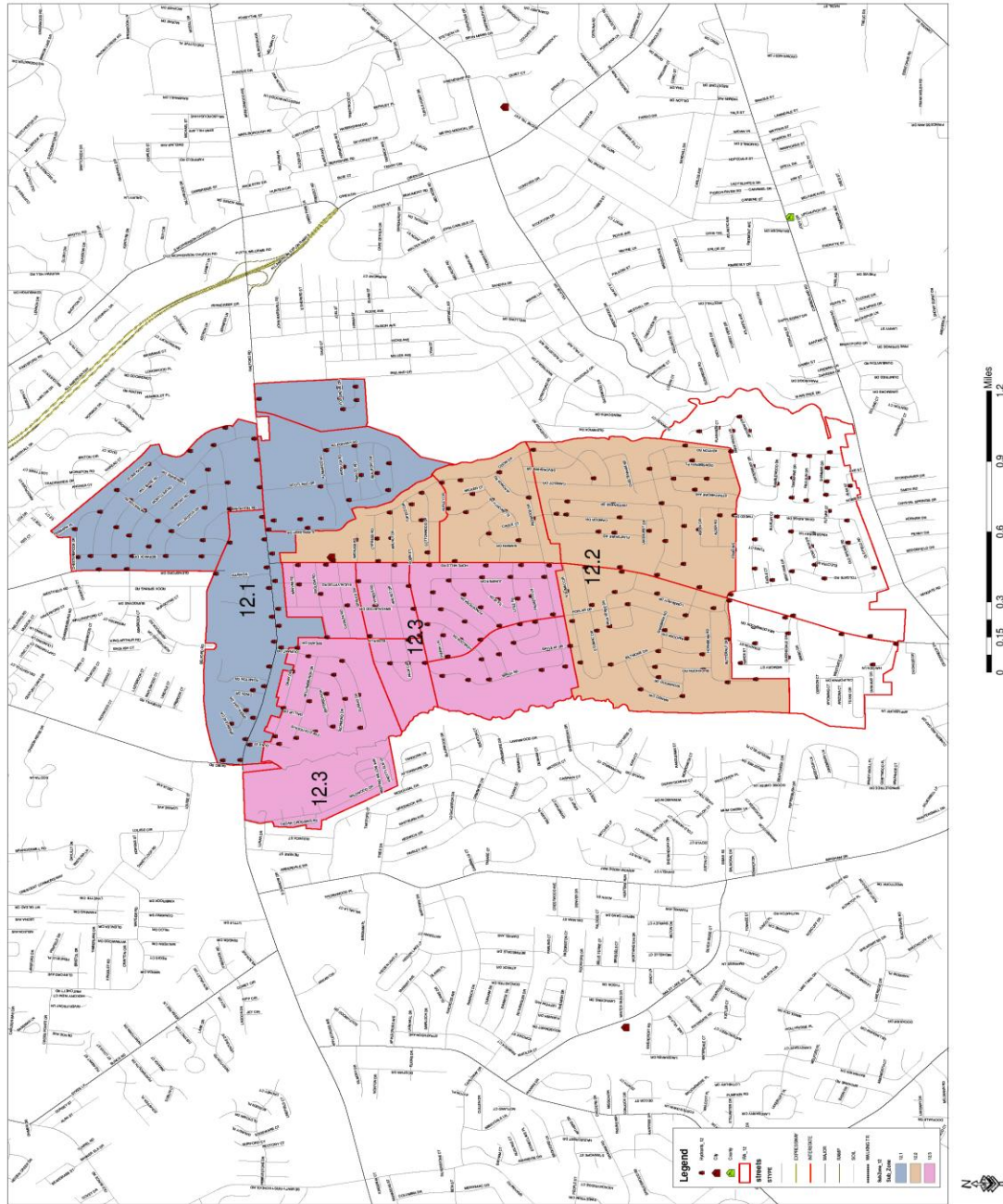
Number of Bays- 5

Located at 307 Hope Mills Road, Station has a daily minimum staffing of 3 personnel operating Engine 12 from that location. This is the organization's gas powered equipment repair facility with personnel conducting preventative maintenance and repairs in house.



Station 12 Response Area

City of Fayetteville Fire Stations and Zones - Zone 12





Station 12

Units






Engine 12





Station 12




Response District Description

-  Engine 12's area is made up of primarily residential structures with a mix of some commercial district along the main routes of Hope Mills Rd and Raeford Rd. These businesses along these routes are primarily made up of single story strip mall type facilities, older commercial grade buildings and residential dwellings that have been converted for business uses.
-  City of Hope Mills borders to the south of the district divided by Cumberland Rd and Hope Mills Rd. Cumberland Road fire district borders Engine 12's district to the south also divided by Hope Mills Rd and Wingate Rd. To the east we are bordered by Engine 5 and the dividing line is Raeford Rd and Ireland Dr and south to Coventry Rd. To the north of Engine 12 is Station 6 with a dividing line of Glensford Rd and the intersection of Raeford Rd and Skibo Rd. To the west we are bordered by Station 17 divided on Raeford Rd at the intersection of Raeford Rd and Revere St.
-  The two main routes of travel through the district consist of Hope Mills Road and Raeford Road. Raeford Road extends to the west portion of the City and on into Hoke County. This road is a major travel route for daily commuters in and out of the City of Fayetteville. Hope Mills Road is also a very heavily travelled road. This four lane road intersects with Raeford Road and extends in the opposite direct on into the City of Hope Mills. This serves are the primary business route for the City of Hope Mills. Many of the residents of Hope Mills utilize this road as their main access into Fayetteville each day.


Critical facilities and public buildings

-  Engine 12's area has approximately six apartment complexes in within the area.
 - Fox Grove Apartments
 - Tree Top Apartments
 - Williamsburg Green Apartments
 - Odom Townhomes
 - Watauga Manor Apartments
 - Alamance Apartments
-  There are three schools that are a part of the Cumberland County School System located within the Station 12 response district. Listed below are these schools.
 - J.W. Coon Elementary School
 - William H. Owen Elementary School
 - Sherwood Park Elementary School





-  The City of Fayetteville has a dump site for yard debris located at the end of Spruce Street. This location poses a potential high risk of fire due to the amount of natural vegetation. During time of extreme heat and dry weather conditions, the potential of a large fire is at its highest for this location. With several neighborhoods surrounding this site, the risk of a fire spreading to nearby residences is high as well.
-  Transportation hubs (airport, train station, bus station) **none**
-  Hospitals, medical complexes **none**

Water supply

-  Water supply is excellent, with 2 large lines running the length of Raeford rd. Hydrant spacing is excellent and we have no problem with pressure or volume. There are a total of 154 hydrants located within the district. With the current available hydrants in the district, there have not been any areas identified as having a limited availability of water. All hydrants and water mains are service by the Public Work Commission of Fayetteville.

District-specific considerations

-  One area that has been identified within this response district as having limited accessibility is Pompton Drive. This is a dead-end road with several residential structures and a small pond. The area of limited access is located at the pond. Two residences are located on the far side of the pond. The only way to gain access to these residences is by crossing the dam for the pond.
-  Identify areas of special concern
 - Flood-prone areas within the district are listed below.
 - Raeford Road just west of Skibo Road
 - Odom Drive
 - Coventry Road
 - Bridges with low weight restrictions
 - The dam on Pompton Drive
 - Any additional areas of consideration:
 1. Wildwood Drive due to the numerous speed bumps located in the Wildwood Mobile Home Park



Fire Station 14

632 Langdon Street

Child Safety Seat Permanent Check Station

Telephone – 910/433-1400

FAX - 910/483-6227



Construction Date- 2005

Size – 19406 square feet

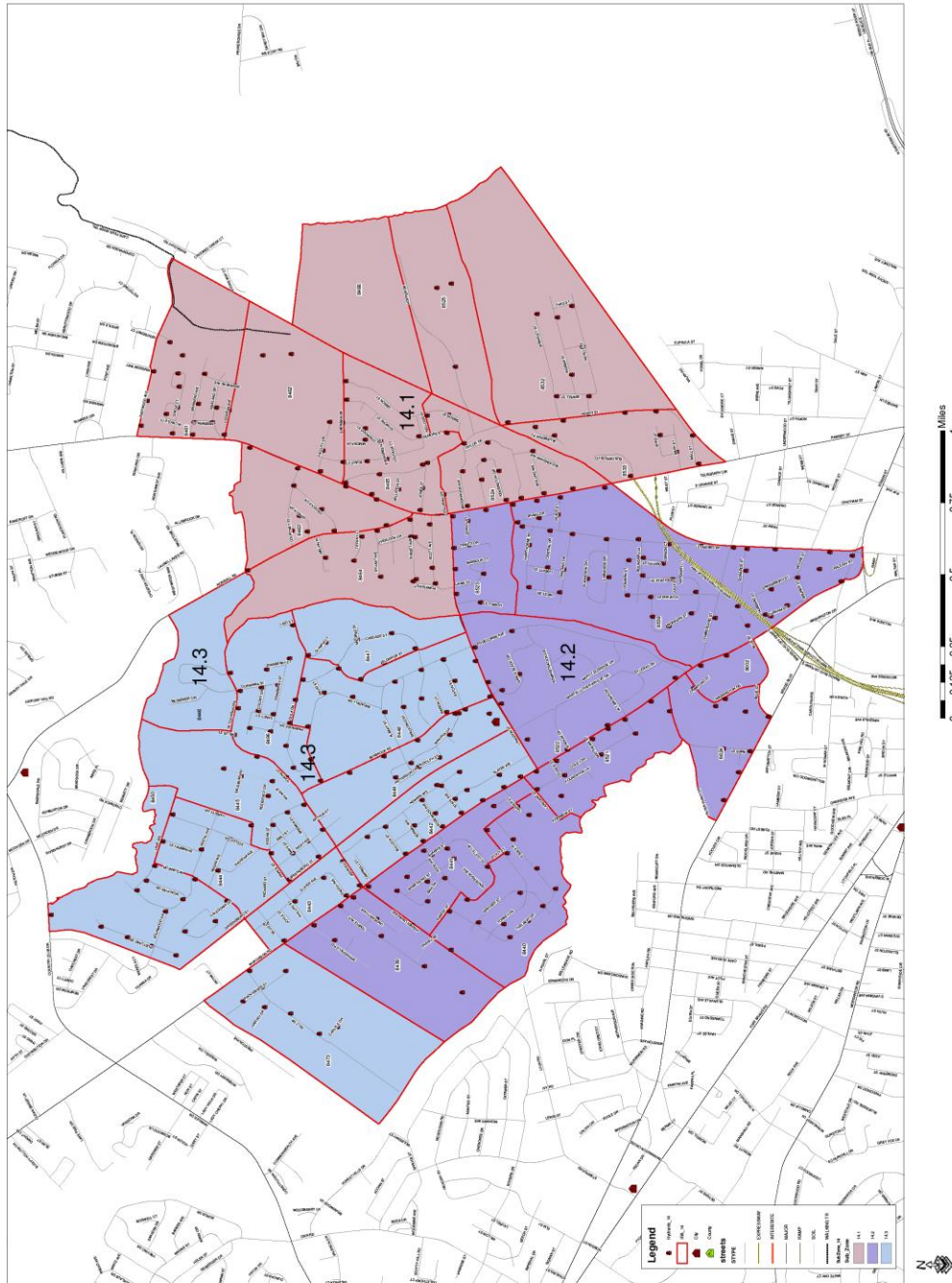
Number of Bays- 6

Located at 632 Langdon Street, on the Fayetteville State University Campus, Station 14 is the headquarters of Battalion 1 and has a daily minimum staffing of 5 personnel operating Engine 14, Rescue 14 and Boat 14 from this location. The award winning facility is designed as the central focal point for higher education in the organization. The design of the Station encompasses a fully functional Fire Station, along with classrooms and college dorm rooms for University students, and office space for Police Officers assigned to local patrol sectors.



Station 14 Response Area

City of Fayetteville Fire Stations and Zones - Zone 14





Station 14

Units



Battalion 1



Engine 14



Station 14

Units



Rescue 14



Ladder 212



Station 14

Units







Support Units




Station 14

Response District Description

District Location and Description

-  Fire Station 14 is located at 632 Langdon St. Engine 14 and Rescue 14, and Battalion 1 are the primary units that respond out of this station. The location of this district is just outside of what is considered “Downtown Fayetteville.” With the exception of a major transportation hub, there is very diverse assortment of building and facilities spread throughout the district. Some geographical features that make this district unique are the Cape Fear river trail that runs through the east side of the district, along with some other significant ravines and terrain changes. The district has several “natural” areas including several city parks and some acreage of heavily wooded areas on the east side.
-  The district borders the Cape Fear River on the east which divides the city and county. The north part of the district borders fire station 3 in what is largely residential areas with a small mix of commercial use. A major thoroughfare borders our district on the west/northwest and down to the south end of our district. We border station’s 2 and 1 on these sides.
-  Station 14’s district has many travel routes that run through it. These include Ramsey St. (Hwy 401), Murchison Rd. (Hwy 87 north), and Bragg Boulevard (Hwy 24). There are several other significant city “arteries” than run through this district
-  The district has 3 separate train routes that run through it all of which originate “downtown.” There is a route that runs north up the Cape Fear River, there is a route that runs parallel to Murchison Rd., and a route that runs up Hillsboro St.

Critical Facilities and Public Buildings

-  Station 14 has many multi-family residences. These apartment complexes are all public housing projects with the exception of a complex beside Fayetteville State University occupied by students
 - University Place Apartments (Private/Mainly college students)
 - Mt. Sinai Apartments (Public Housing)
 - Blueberry Place Apartments (Public Housing)
 - Melvin Place Apartments (Public Housing)
 - Rosehill Gardens Apartments (Public Housing)
 - Tiffany Court Apartments (Public Housing)
 - Ramsey Street Apartments (Public Housing)



- Summit Apartments (Public Housing)
 - Elliot Circle Apartments (Public Housing)
 - Fayette Arms Apartments (Public Housing)
- There are two county owned facilities located within the response district. These two facilities are located side by side on Ramsey Street. Both facilities are several stories tall and will require a large amount of resources in the event of a major incident. They are listed below.
- Cumberland County Social Services
 - Cumberland County Health Department
- The Station 14 response district has several educational facilities. These facilities include schools from the Cumberland County Schools System and the College systems. Listed below are the schools that are located within this district.
- Fayetteville State University
 - E.E. Smith High School
 - Ferguson-Easily Elementary School
 - J.D. Fuller Elementary School
 - Nick Gerald Elementary School
 - Trinity Middle School
 - Ramsey Street Alternative
- Station 14 services 2 of the city's water treatment facilities including the Hoffer plant which provides the majority of the city's water supply. The second facility is Glenville watershed. There are several large power substations throughout the district.
- There are facilities in station 14's district that could be considered hazardous-materials complexes. The Hoffer plant houses large quantities of chemicals, as well as Glenville watershed. Commercial Merchandise has a transient amount of hazardous-materials stored on their property at times, and Concrete Services complex has the potential for hazardous-material situations.
- This district houses several healthcare complexes of all ranges. The Cumberland County Health Department recently opened a large multi-story state of the art facility capable of numerous health services. The Cumberland County Social Services Administration is housed on the same property as the Health Department. Both buildings are considered "high-rise" facilities. The VA Hospital is also in this district and it is a large complex consisting of 7 buildings. The main building is a 7 story wood frame structure also considered a "high rise." There is also a large VA nursing home located at 214 Cochran Avenue.



Water Supply

- Station 14's district is adequately covered with hydrants. All of the hydrants in station 14's district are P.W.C. hydrants. There are a total of 365 hydrants in the station 14 response district. The Glenville Lake, which is a large watershed for the City can be accessed by a pumper as a static water source. This is the only one located within this district.

District-Specific Considerations

- There are some areas of limited access on station 14's district. These include the "river trail," which can only be accessed at 2 points and require an all-terrain vehicle to travel in any direction. The VA complex is a very tight area to navigate especially during normal business hours. There are several roads in this district that are separated either by fence or land. Knowing block numbers is crucial with these roads. These roads include Gibson St., Gilmore St., Slater Ave., and Cochran Ave. There are 2 major concerns with flooding in this district. The first is the area of Murchison Rd. and Cumberland St. The second is Filter plant Dr. in the dip. These areas can hold very little rainfall before they need to be monitored.
- Identify areas of special concern
 - Station 14's district as a whole carries some major concerns. Due to the economic status of most citizens in the district the overall rate of fire is high. The district is riddled with structures that should be condemned or have already been condemned that are now occupied by vagrants.
- The district also contains many properties that require special considerations due to their size, occupancy load, contents, or condition



Fire Station 15
399 Buhman Drive

Telephone – 910/433-1501
FAX - 910/864-1370



Construction Date- 2008

Size – 10680 square feet

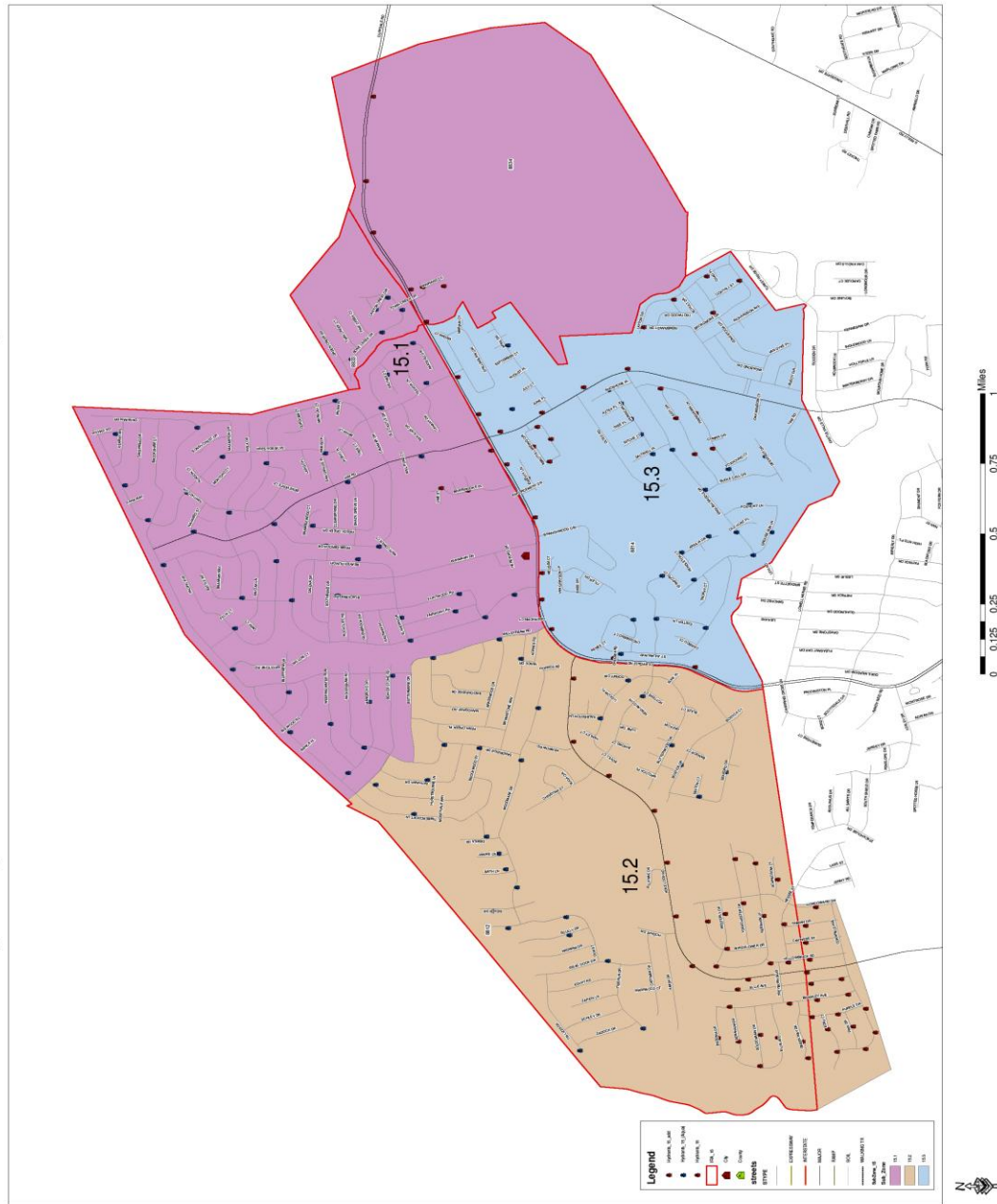
Number of Bays- 4

Located at 399 Buhman Drive, Station 15 has a daily minimum staffing of 3 personnel operating Engine 15 and Brush 15 from this location. This facility is the example of future Fire Stations in the City of Fayetteville, with a variation of this facility's design being utilized. The design includes a fully functioning Fire Station, space for Community Meetings as well as office space for Police Officers assigned to local patrol sectors.



Station 15 Response Area

City of Fayetteville Fire Stations and Zones - Zone 15





Station 15

Units



Engine 15






Brush 15




Station 15

Response District Description

District Location and Description

-  The response area of E15 is in the western portion of the city. The area has one of the largest populations in the city due to the abundant number of residential structures including 20 single family dwelling neighborhoods, Beaver Run, Bone Creek, Brook Run, Cliffdale Estates, Cliffdale Point, Cliffdale West, Colony Village, Farmington, Harris Place, Hawthorne, Hunters Crossing, Lake Rim Shores, Lake Rim North, James Creek, Middle Creek, Montibello, Scotts Mill, Scotts Mill North, Village Commons and Village Hills. 7 apartment complexes, Abbott's Landing, Bone Creek, Bristol Park, Enclave, Maple Ridge, Parcston and Westpark Place. 4 mobile home parks including Hickory Lane, Oakland, Sunset and Sweet Water. There is a small portion of the area that is commercially populated, which is located at the intersection of Rim Rd. and Cliffdale Rd. This includes 3 strip malls, Montibello Center, Montibello Plaza and Sunny Plaza. We also cover a hand full of standalone businesses.
-  E15's borders are covered mostly by Ft Bragg to the north, Hoke County to the west and by E8 to the east and E11 to the south. This area is continually growing and expanding.
-  E15's response area only has one main highway which is Cliffdale Rd. This portion of Cliffdale Rd. can be very congested at times due to the amount of military personnel that live in the general area. Cliffdale Rd connects S. Reilly Rd. and Highway 401. Reilly Rd. is one of the main roads leading into and out of Fort Bragg.

Critical Facilities and Public Buildings

-  E15 is responsible for a total of 3 elementary schools, 2 of which have recreation centers attached. EE Miller Elementary school is located on Rim Rd. and has a recreation center and a Cumberland County Head Start Center attached to it. Lake Rim Elementary is located on Hoke Loop Rd. and has a recreation center attached and Bill Hefner Elementary is located on Calimar Dr. in the Montebello sub division. Bill Hefner is unique because it is actually located on Ft. Bragg property but is operated under Cumberland County Schools. This is due to the high number of military personnel in this area Ft. Bragg donated the land and built the school. There is also an Aqua America substation located in the Cliffdale West subdivision.



Water Supply

Unlike most engines in the city, E15 carries 1000 gallons of water as well as our neighboring engines (E8 and E11) due to the area not being heavily populated with fire hydrants. There are approximately 212 fire hydrants in the district. They are owned by PWC and Aqua America and are identified by their paint scheme. With the current development of the area more hydrants are added during construction for further fire protection. E15's district is divided into 3 separate hydrant zones, 5.1, 15.2 and 15.3.

There are a total number of 163 hydrants located within this district.

District-Specific Considerations

- There are some areas within the Station 3 response district that have been identified as limited accessibility. Listed below are the specified areas.
- Incorporated County Station 10 area requires a travel distance of more than 4 miles, causing problems with achieving Benchmark times.
 - Mobile home parks located at Wriston Dr. and Watershed Dr. have only one entrance. The entire MHP is surrounded by 6' chain link fence with barbed wire. Apparatus must back out completely to exit area.
 - Kenbrian Street – Overgrown trees restrict access.
 - Terry Hill Street – Single road with no room to turn apparatus around. Either have to back apparatus out onto Murchison Road or park in turn lane on Murchison Road.
- E15 has 3 areas that are prone to flooding during significant amounts of rain. The main one is located on Hoke Loop Rd. just prior to James Creek subdivision near a large drainage pond. One is also located at the entrance to Harris Place subdivision, and the last on Mahogany Dr. located in the Cliffdale West subdivision.



Fire Station 17

6701 Bailey Lake Road

Child Safety Seat Permanent Check Station

Telephone – 910/433-1501

FAX - 910/864-1370+

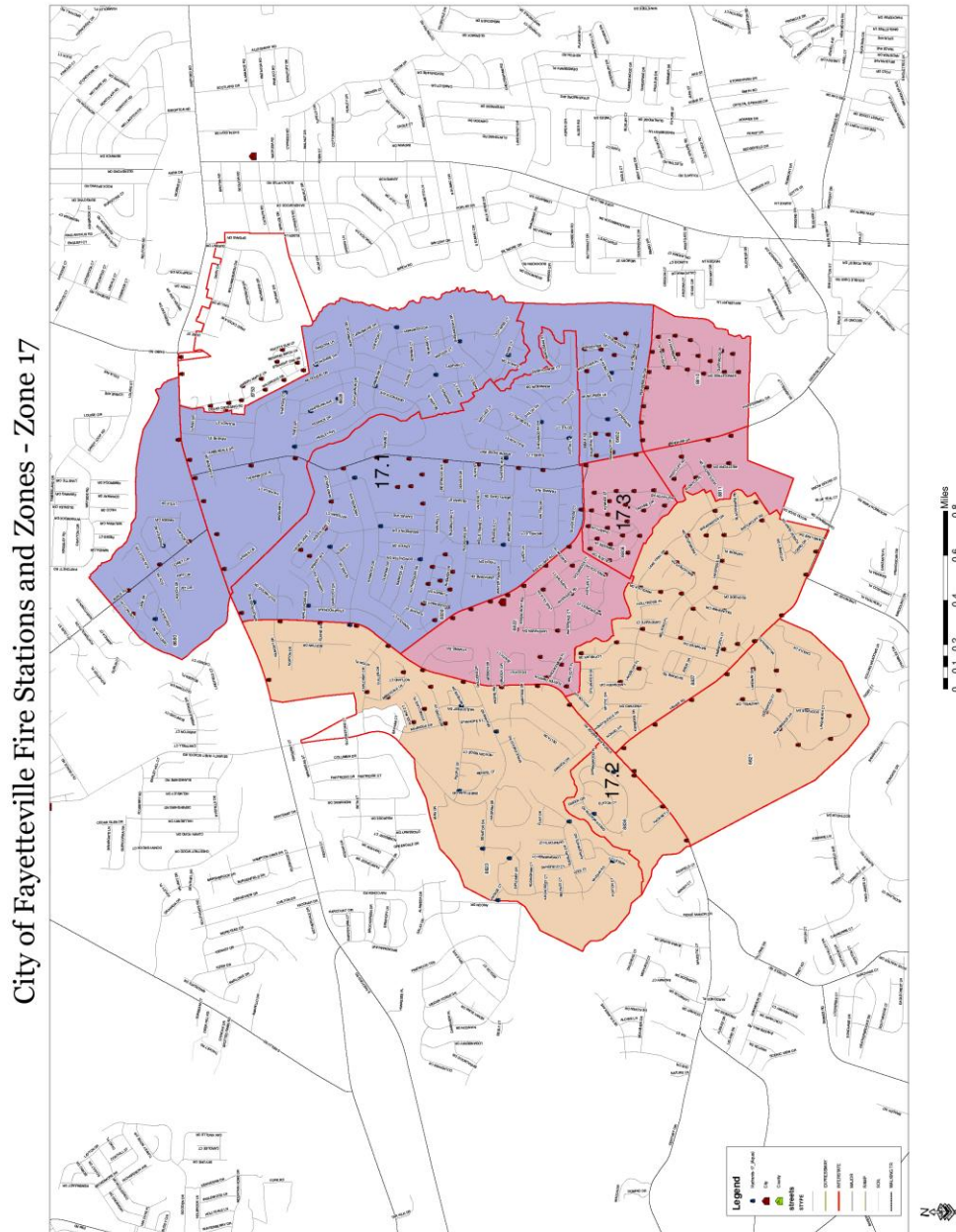


Construction Date- January 2002 **Size –** 10,080 square feet **Number of Bays** 6

Located at 6701 Bailey Lake Road, Station 17 is the headquarters of Battalion 3 and has a daily minimum staffing of 5 personnel operating Engine 17 and Squad 17. The facility is the quartermaster depot for all uniform and personal protective equipment needs within the organization.



Station 17 Response Area





Station 17

Units



Battalion 3



Engine 17



Station 17

Units



Squad 17



Brush 17



Station 17

Units






Rehab Unit





Station 17

Response District Description


District Location and Description

-  Station 17's response district is located in the south-western portion of Cumberland County. There are several strip malls, several commercial business spread throughout the district, and one public school. Most residences in the area are single family dwellings, with several multi-family apartment complexes.
-  Station 17 is bordered to the north by station 8's area, county station 13 to the south, station 12 to the east, and station 11 to the west.
-  The major roads in station 17's are Raeford Road, Bingham Drive, and Strickland Bridge Road, Raeford Road runs east to west, on the northern edge of station 17's district, and has four lanes of travel (two in each direction.). Bingham Drive and Strickland Bridge Road run north to south, and start at Raeford Road. Bingham has four lanes of travel (two in each direction), and Strickland Bridge has two (one in each direction). Three secondary roads used to travel between Strickland Bridge Road, and Bingham Drive is Kincross Avenue, Bailey Lake Road, and Fisher Road (run north to south). Fisher is the most heavily traveled of the three.

Critical Facilities and Public Buildings


-  The major multi-family apartment complexes in station 17's district are listed as follows:
 - Falcon Village Apartments
 - Creeks Edge Apartments
 - Sheffield Condo's
 - Southwood Apartments
 - Stoneridge Apartments
 - Hidden Lake Apartments
 - Adams Lake Apartments
-  The shopping complexes in the district are strip malls located at
 - 6541 Raeford Road
 - 6323 Raeford Road (Falcon Village)
 - 6257 Raeford Road (Bingham Plaza)
 - 6557 Fisher Road (Rockfish Plaza)
 - 1764 Bingham Drive (Bingham Station)





 Other critical facilities in the Station 17 response area are:

- Brentwood Elementary School
- Josiah Medical and urgent care facility

Water Supply


 The Public Works Commission (PWC) and Aqua North Carolina supply water in station 17's district. There are a total number of 163 hydrants located within this district.


 The static water sources in station 17's district are a dry hydrant located on Greenock Ave. supplied by Arran Lake, and a drafting point located on a private pond located at 2205 Strickland Bridge Road.


 Areas with insufficient hydrant coverage are listed below. All of these areas are supplied by the Aqua North Carolina Water Company


- Lakepoint Place,
- Robinhill Road / Robinwood Road
- Hickory Grove Subdivision
- Arran Lakes Subdivision
- Shenandoah Subdivision
- Arran Lakes North Subdivision
- Arran Hills Subdivision
- Winterpark Subdivision
- Shadowlawn Subdivision
- Glenhaven Subdivision
- Dankirk Heights.
- Meadowood Subdivision (Has no hydrants)


District-Specific Considerations

 Station 17's district has several limited access areas. Some of the dirt roads are not drivable by modern fire apparatus without causing damage to vehicle. This includes Sun Valley Drive, and several other private drives and dirt roads.

 Other dirt drives are assessable by a fire engine, but not a ladder company. These include Roy Drive, and Hagram Drive.

 There are multiple small lakes and ponds in station 17's district.

 Creeks Edge apartments are the only known flood area in the district.

 Multiple heavily wooded areas with limited or no access throughout the district.



Fire Station 19 (Temporary Location) Telephone – 910/433-1938
522 Andrews Road FAX - 910/488-1645



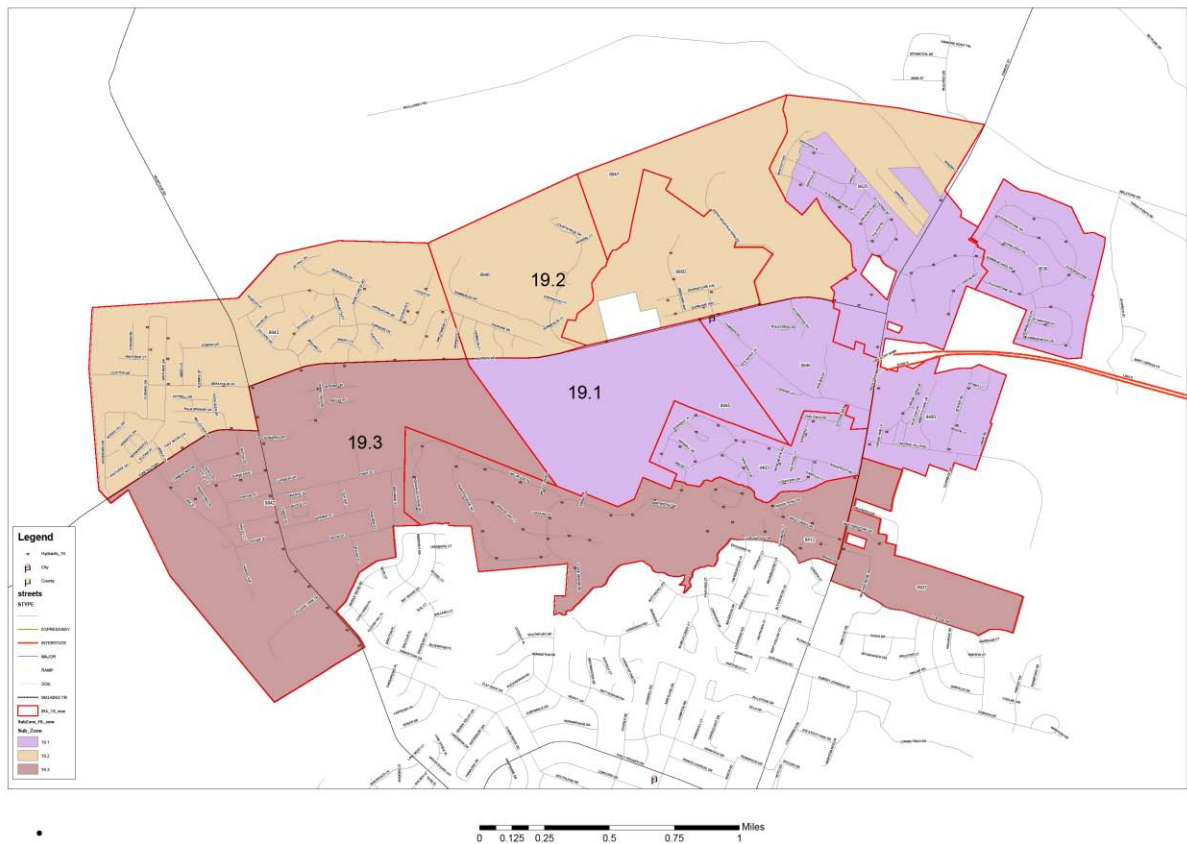
Construction Date- 2004 **Size –** 2500 square feet **Number of Bays-** 1

Located at 522 Andrews Road on the property of Howard Hall Elementary School, Station 19 has a daily minimum staffing of 3 personnel operating Engine 19 out a temporary facility at this location. Construction on a permanent Station is set to begin in the summer of 2010 at a location across from the current site.



Station 19 Response Area

City of Fayetteville Fire Stations and Zones - Zone 19





Station 19

Units







Engine 19





Station 19

Response District Description






District Location and Description

-  Located at 522 Andrews Rd, Temporary Station 19 has a daily minimum of four (4) personnel. The temporary station is a commercial grade mobile home capable of being moved to other sites as the City grows. It is a single company station housing Engine 19. Engine 19 is a 1996 Pierce 1500 gpm pumper equipped with suction hoses for drafting and a quick dump system to comply with Cumberland County Fire Department standards.
-  Construction of the permanent Station No. 19 has begun at 3481 Walsh Parkway of Andrews Road in north Fayetteville. The station project total cost is approximately \$2.7 million and will add a permanent station in close proximity to the area where a temporary station is now located since 2009. The station will meet the current NFPA standards. The station will be located in the developing Patriot Park Business Park and is expected to be finished in late September to mid-October 2011. Station No. 19 is being added to meet projected growth and to reduce emergency response times.
-  The Fayetteville Fire/Emergency Management Department received a Department of Homeland Security sponsored assistance to firefighters grant in the amount of \$2.1 million to assist with the personnel cost of the 15 firefighters needed to staff the facility. The grant covers a five-year period. The addition of Station No. 19 is necessary to meet the growing fire and emergency service demands of north Fayetteville. The new station will provide the required minimum fire personnel on the scene for all emergency incidents in the area. The Fayetteville Police Department will use office space in the building for patrol officers working the north end of the city, as well as crime prevention personnel.
-  The response area for Station 19 is located in the northern portion of Cumberland County, in an area that was once predominately woodlands. This area is growing rapidly with the development of residential and commercial properties, and the influx of additional military personnel. **BRACC**, or Base Realignment and Closure Commission, is responsible for moving **FORSCOM** (US Army Forces Command Headquarters) and **USARC** (United States Army Reserve Command) to Ft. Bragg. Total expected growth for the region is an additional 45,000 personnel. This has caused growth in northern Cumberland County.



-  Station 19's district has several major routes of travel running through it. Ramsey Street runs north and south through the east side of the district. McArthur Road runs north and south through the west side of the district. Andrews Road and Honeycutt Road runs east and west. They are the main thoroughfare to Fort Bragg from Interstate 295. Interstate 295 enters the district from the east and connects Interstate 95 to Ramsey Street. Fort Bragg borders station 19's district to the west. Most of the northern area borders County Station 15's district with the exception of the area west of Ramsey Street on McCloskey Road which is in the Fort Bragg district. The east side of the district also borders County Station 15's district. The southern border meets City station 7's district.
-  Station 19's primary response area is made up of about 60 percent of County Station 10's old area which was part of the Westarea Vol. Fire Department. County Station 10 shut down on December 31st 2009. The CITY OF FAYETTEVILLE has a reverse contract with the Westarea Vol. Fire Department to provide first response for that area.

Critical Facilities and Public Buildings

-  Cape Fear Valley Health Plex North is located on the corner of Ramsey St. and Andrews Rd. It is a large 2 story building where multiple services are provided including but limited to emergency health care and radiation therapy as well as exercise equipment and an indoor track for fitness.
-  Station 19's district includes Two Elementary Schools. Howard Hall Elementary and Long Hill Elementary. One High School, Pine Forest High School.
-  On the outer edge of the district is the River Walk Trail with miles of clean paths and bridges built to give citizens a place to enjoy nature as well as a place to find refuge from the summer heat in the cool shade along the banks of the Cape Fear River.
-  These are areas of concern due to possible rescue conditions in difficult to reach areas. The district also has areas of limited and or difficult access areas.
-  Five \$400, 000 plus homes are located in a private community on Stone Mountain Dr. They are secured by a privacy gate entrance which may delay a quick response. The road into the area is a single vehicle road that crosses over a pond which may not allow the heavy equipment to pass over.



Water Supply

- Water supply in the district is supplied by Fayetteville Public Works Commission. Most of the hydrants are located in the commercial areas and the recently constructed neighborhoods. Hydrants are limited in the older Eureka Springs area. The district also has large homes in secluded areas with no immediate water supply except where a few of the homes may have a pond nearby. We will rely on County stations to provide tenders for water supply. Engine 19's district contains **201** hydrants, divided into three separate hydrant zones.

District-Specific Considerations

- The district is home to many types of living areas for the public. An 18-hole golf course known as Kings Grant Country Club on Shawcroft Rd is surrounded by over 400 homes and condominiums which are difficult to respond to and navigate within due to the long distance to some of the residential homes and gated access to some areas within the community. Speed humps are in place to restrict speed and slow vehicles as well as to provide a safety measure for children playing nearby.
- Zipquest located on Carver Falls Rd is a new business to the area that offers the public a place to go and enjoy secluded sections of wooded area, beautiful waterfalls and exotic plants all while hanging from a safety harness gliding through the area from tree to tree on a zip line.
- A single home valued at over \$300,000 is located in the county contracted area but due to its close proximity to station 19 we would be the first to arrive on the scene. The home is located back in a wooded area on a private road which is not passable by any unit bigger than a Brush truck or Squad. The Home is located off Arundel Ct. off Countryside Dr.



Component C: Community Expectations and Performance Goals

Introduction:

This section of the document serves as a reference to why the department provides the required services to the community. It is the understanding of the department that in order to effectively provide services that are desired by the citizens of Fayetteville, a collaborative synopsis of information and opinions must be developed in order to deliver that which is most needed. Through information received from external stakeholders, utilizing best practice methods within the fire service, along with the departments' understanding of the demands within the fire service has allowed us to develop programs that allow us to provide the best available services to the public.

Currently, the department provides a wide range of services that include fire suppression, emergency medical care, emergency management, hazardous materials response, technical rescue, fire investigation, fire prevention, and public education. Through effective budget planning and utilizing our resources wisely, the department is able to provide these services with the most up to date equipment available. The majority of the three hundred thirty (330) personnel work out of sixteen (16) fire stations that are strategically located throughout the city. With a minimum of three personnel assigned to the engine and truck companies, the department is able to effectively provide the required services.

Service Delivery Program Transition:

Fire Suppression

While the overall method of extinguishing fires has remained constant over the course of time, the resources that are utilized to do so have seen many adaptations. The Fayetteville Fire/Emergency Management Department has seen such changes in the delivery of its fire suppression services over the course of the 200 plus years of service. Fire Suppression first consisted of a group of volunteers equipped mostly with leather fire



buckets before transitioning into a more organized department. Years later, Fayetteville purchased its first hand powered engine in the year 1832 and eventually moved to motorized fire apparatus in 1914.

As the City of Fayetteville began to grow, additional stations were opened, and the transition into a full-time department evolved. Today, the department consists of three hundred thirty (330) personnel and sixteen (16) fire stations that are strategically placed throughout the city. In January of 2008, the department officially began the process of becoming an accredited organization through the Commission on Fire Accreditation International. During this process, the department examined every aspect of the services that we provide to the public. This process allowed us to determine how effective we have been at delivering our services and also identified areas where we needed to make organizational improvements. During this process, we utilized maps, statistics, and other resources that assisted us in identifying areas where we could improve. Determining how quickly we can put units on scene, locations of future stations, and the ability to perform critical tasks, contributes to the continued implementation of the departmental fire response program.

Emergency Medical Services

The Fayetteville Fire/Emergency Management Department provides emergency medical services to the public through its first responder program. The department first began providing these services in the early 1960's. During this time, the current state EMT credentialing was not in existence. The personnel of the department were required to take an Advanced First Aid class that was sponsored through the American Red Cross. Later, in the early 1970's, department personnel became certified as NC EMT-Basics and began providing emergency medical services. Due to the ambulance services consisting primarily of volunteer rescue squads, the department also transported patients within the City of Fayetteville.



With the development of the Cumberland County Emergency Medical Service (CCEMS), the department began phasing out the transportation of patients in the mid 1980's. Today, all line personnel continue to maintain the EMT-Basic certification and provide support to CCEMS within the boundaries of the City of Fayetteville. The current demand for Emergency Medical Services makes up roughly seventy six percent (76%) of our annual call volume. This demand for this service has continued to increase each year and the department continues to work towards enhancing its capabilities in providing these services to the City of Fayetteville.

Hazardous Materials

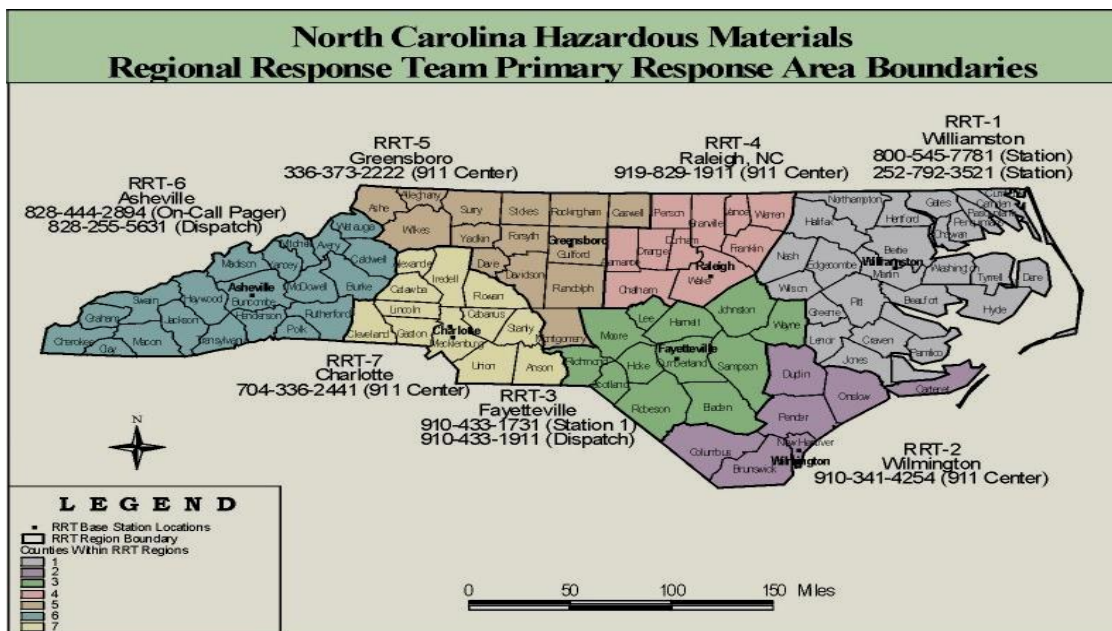
Communities across the nation have seen an increase in the responses to hazardous materials incidents in the last several decades. In the earlier years of the departments history, there was limited if any involvement with the containment or mitigation of a hazardous materials incident. The department's earliest involvement was in the mid 1980's and did so through a joint venture between the FFD and other volunteer fire departments called the Cumberland County Emergency Response Team.

In 1987, due to the rising demand and call volume accompanied with the difficulties of volunteer's to adequately train and respond to these types of incidents, the FFD assumed the overall duties of the Hazardous Materials Response team. In 1994, Fayetteville along with other regional departments began working towards implementing legislation where the state of North Carolina would support what is now called the Regional Response Teams. These teams are strategically placed throughout the state and provide services to their respective regions should the need arise. Today Fayetteville Fire/Emergency Management Department operates one of the leading Haz-Mat teams in the state and is home to Regional Response Team 3.



RRT-3 Response Area

Cumberland	Bladen
Hoke	Harnett
Lee	Moore
Richmond	Scotland
Robeson	Johnson
Wayne	



Rescue

There have been some significant adaptations to the delivery of emergency rescue services over the years with the Fayetteville Fire/Emergency Management Department. Prior to the use of hydraulically operated equipment, the department relied primarily on the use of specialized hand tools that required extensive efforts by personnel. The use of these tools are still used in a limited capacity today, often resulting in extended amounts of time when removing victims from harm. In the mid 1980's, the department purchased its first hydraulically powered extrication equipment. The use of these tools allowed the department to take its capabilities for providing rescue services to a higher performance level.



Extrications and other operations proceeded at a notably faster pace and allowed personnel to more effectively provide care to patients. Today, the department has ten units that carry hydraulic extrication equipment. In 1994, the department placed its first Heavy Rescue Unit in place at Station 4. This unit carried an array of equipment for operations that included high and low angle rescue, extrication, and rescue intervention, along with several other capabilities. Today, the department has increased its fleet to include two units capable of performing Heavy Rescue along with dedicated personnel for the Collapse Search and Rescue team (CSAR). This team has a vast array of equipment that is specifically designated for the operations of incidents that include confined space, trench, land search, structural collapse, and other technical rescue operations that aren't typically experienced on a day to day basis.

Emergency Management

Prior to 2007, Cumberland County Emergency Management (CCEM) was the primary provider for emergency management. In 2005, the department added the position of Emergency Management Administrator and adopted the department's current title of Fayetteville Fire/Emergency Management Department. With the new position in place plans for the mitigation of significant events specific for the City of Fayetteville itself were developed and a cooperative agreement between Cumberland County and the City was created.

This was an area with potential negative ramifications if not properly addressed and due to the overall size and needs of the city, the management of such a program by CCEM was no longer efficient. Due to a shift in the FFD organizational structure in 2009, the duties of the Emergency Management Administrator transitioned into that of a coordinator and the responsibilities were placed under that of the Battalion Commander over Special Operations.



Fire Prevention

Fire Prevention and inspections have been a vital part of our organization for several years now. Since the mid 1940's the department has had a division dedicated to ensuring that all codes as they are defined in the North Carolina Fire Code are adhered to by property owners. Initially, the department followed local ordinances and other building codes while conducting inspection until the NC Fire Code was first adopted in 1991. While the methods that are followed while conducting inspections and other fire suppression programs have not changed over the years, the number of people that are functioning under the Fire Prevention Division has seen considerable growth. The most recent addition to the Fire Prevention program is performing plans review for all new construction. With the addition of this new assignment, the department was able to gain one additional Fire Inspector to bring their staffing levels up to seven Fire Inspectors and one Battalion Commander/Fire Marshal that oversees the overall implementation of the program.

Public Education

The department has been involved with public education for a number of years. Primarily, the department relies on the individual engine companies to implement the programs and interact with members of the public that range from adults to young school children. The Captain who oversees the implementation of the Public Fire Education program works within the Fire Prevention Division. This position serves primarily as the overall coordinator of the Public Fire Education program throughout the department. All scheduling and new initiatives come from the Public Fire Education Coordinator with approval of the Chief. The department sponsors an annual Safety Day, attends school functions, provides informative station tours, and participates in numerous events throughout the year with the purposes of informing the public.



Fire Investigations

The process of investigating a fire has seen many changes over the course of the last several years. Previously, all fire investigations fell under the duties of the Fire Prevention Division and the Fire Marshal for the department. Fire Inspectors were tasked with the responsibilities of performing the overall investigations. Due to the growth that the department has experienced over the years and the ability for inspectors to effectively maintain the fire inspections within the city's jurisdiction; the decision was made to transfer the responsibility to the Incident Commander of the fire scene. All Company Officers with the FFD are provided training regarding investigating fires. In 2007, the department initiated the FFD Fire Investigation Team (F.I.T.).

This team consists of a number of representatives from the department with the responsibilities of providing personnel with the qualifications of performing investigations. Along with the F.I.T., the department also maintains a close working relationship with the NC State Bureau of Investigation which has a unit solely dedicated to the purpose of investigating fires in the state and the Fayetteville Police Department. The FFD has the primary objective of determining cause and origin of fires. Once all evidence has been gathered and reference materials documented, the FFD turns the evidence over to the Fayetteville Police Department for evidence processing and all other legal procedures.



Performance Expectation Goals

Mission Statement



The Fayetteville Fire/Emergency Management Department
is committed to the preservation of life, property, and
the environment in our community through effective public education,
fire code enforcement, and emergency response.

We are dedicated to achieving customer satisfaction while serving
with R.E.S.P.E.C.T.

Vision Statement

By utilizing the talents of diverse and dedicated work-force, the Fayetteville Fire/Emergency Management Department will be recognized as a regional leader acclaimed for our progressive nature and service attentiveness as we strive to improve the quality of life for the citizens and visitors of the City of Fayetteville. We will consistently plan and make use of ever changing technology and state-of-the art equipment to be an organization to which all others will benchmark their efforts.



Performance goals

Each year, the department takes part in the development of the FFD Strategic Plan. The plan is designed to provide direction over the course of the next five years. The annual review of this document serves the purpose of ensuring that the department is following the paths that have been set forth along with the addition or elimination of plans that are or are not conducive to the further development of the Fayetteville Fire/Emergency Management Department and the City of Fayetteville. Within this document, there are several identified goals that the department has identified. These goals are developed in order to achieve the overall goals that are identified in the departments Mission and Vision Statements. It is the intent of the department to serve the community and portray a proactive organization with customer service oriented fundamentals. The following is a list of the current goals that the department has identified.

2010-2015 Departmental Goals

Goal #1: The goal of the Fayetteville Fire/Emergency Management Department is to provide the safest work environment possible for all employees through proactive actions.

Goal #2: The goal of the Fayetteville Fire/Emergency Management Department is to ensure our department is constantly prepared to meet future operational needs.

Goal #3: The goal of the Fayetteville Fire Emergency Management Department is to market our services through the operating philosophy that the fire station is the focal point of any neighborhood and the hub of all City services.



Goal #4: The goal of the City of Fayetteville Fire Department is to ensure the effective communication of goals and objectives throughout the organization.

Goal #5: The goal of the City of Fayetteville Fire Department is to implement innovative ways to improve service delivery through annual review and revision of policies, procedures and established Standard of Coverage.

Goal #6: The goal of the City of Fayetteville Fire/Emergency Management Department is to ensure appropriate type and kinds of resources will be maintained and deployed to support response needs of the community based on City growth and hazard assessments.

Goal #7: The goal of the Fayetteville Fire/Emergency Management Department is to establish an effective recruiting and retention plan that ensures we maintain a highly qualified and diverse workforce.

Goal #8: The goal of the Fayetteville Fire/Emergency Management Department is to maximize efficiency by partnering with national, state, and local organizations and supporting each other's efforts with common goals in mind.



Community Service Expectations

The City of Fayetteville and the FFD function around the basis of seven Core Values. These Core Values are identified through the acronym R.E.S.P.E.C.T. It is through these seven values that the employees of the City of Fayetteville strive to meet the expectation of the community as a whole. Having a high level of commitment to the public, as well as recognizing the importance of customer satisfaction is crucial for the FFD fundamental philosophy on serving the community. The table listed below gives a brief description of the seven Core Values that the City of Fayetteville utilizes when working towards meeting the expectations of the public.

Core Values

Respect.....	We will accept our responsibilities and promote personal accountability.
Ethics.....	We will operate honestly and promote transparency of government.
Stewardship.....	We will operate in a cost-efficient manner and promote fiscal maturity.
Professionalism.....	We will operate with “best-practices” in mind and promote competence.
Entrepreneurial Spirit..	We will operate innovatively and promote creativity.
Commitment.....	We will operate with an understanding of stake holders needs and promote loyalty
Teamwork.....	We will operate as a group and promote cooperation.



With this in mind, the department has conducted several meetings in which it reached out to the community to provide feedback as to what expectations that they as citizens of the community had regarding the Fayetteville Fire/Emergency Management Department. Through the Fayetteville Citizens Academy, Community Watch meetings, and meetings with the local elected officials, the department has been able to gather information from well over 200 individuals from various regions of the City. Just as the City of Fayetteville is a very diverse and cultural rich municipality, the individuals who have provided us with their expectations of the FFD are made up of a similar pool of individuals. The individuals that participated in these meetings were provided with a brief description of the department and current services being provided. They were then asked to complete a questionnaire that allowed them to prioritize services that are provided by the department. They were also asked to note overall expectations, areas of concern, along with provide opinions on positive attributes of the department.

The following table is that which allowed the participants to prioritize the services that are provided by the department. The overall results of these priorities are divided into high, mid, and low level priorities in the table below. The service that was shown to be the most important to those who participated was the Fire Suppression Services. EMS calls, which account for roughly 76% of our emergency dispatch calls was given the second highest priority. The other two categories that received high prioritization were Fire Inspections and Code Enforcement along with Disaster and Emergency Preparedness (Planning).

1. In order to dedicate time, energy and resources on services most desired by our customers, it is important for us to understand what the citizens of Fayetteville consider the priority of services provided by the Fire/Emergency Management Department. Please rank the services listed below in sequential order of importance to you with 1 being the most important and 12 being the least important.



SERVICES	RANKING
Fire Inspections/Code Enforcement	High
Hazardous Materials Mitigation	Mid
Emergency Medical First Responder	High
Disaster/Emergency Preparedness(Planning)	High
Disaster/Emergency Preparedness(Response)	Mid
Fire Suppression	High
Response to Weapons of Mass Destruction/Bioterrorism	Low
Technical Rescue	Mid
Public Fire/Safety Education	Low
Child Safety Seat Inspection/Installation	Low
Smoke Detector Distribution/Installation	Low
Fire Investigations	Low

The use of this information is an invaluable asset to the department in assisting with the strategic planning model that outlines objectives for the department. The information gathered from these questions is critical to developing long range perspectives. It is through the information that is obtained from the public that the department is able to better establish a direction and focus for providing available services. As a result of the information gained from these meeting, the department can identify where more attention and/or adjustments need to be made to better meet the needs of the community served.



In conducting these surveys, the department asked the participants to provide information regarding their expectations of the department, any areas of concern that they may have, and also to identify what they consider our greatest strengths or positive attributes. The department felt that in order to obtain an overall opinion from the public, the questions asked must encompass both negatives and positives of what is being provided to the public. While fire suppression is the number one priority in the eyes of the public, we also needed to determine whether we were providing these services at an acceptable level. Identifying what we need to be doing is only a portion of the spectrum. We as a department want to ensure that we are not only providing the services that are expected, but that we are doing so at a level that is acceptable in the eyes of the community. The following comments are some that we gathered from the survey that were completed. A complete copy of the survey can be found in the appendix section of this document.

Question 2: Expectations

1. To respond to fires, medical emergencies, etc rapidly and competently.
2. To help prevent fire and medical emergencies.
3. Budget for fire code inspections, dry weather/fire warnings, public education, smoke detector installations.
4. Provide education for non-fire related topics(2)
5. Remain knowledgeable

Question 3: Concerns

1. Response times are too long(4)
2. Would like to see a more diverse department in line with the city
3. Incident Response prioritization (EMS) (2)
4. More enforcement of outdoor burning and fireworks
5. I am concerned that FD Staffing is too low



Question 4: Strengths/Positive Attributes

1. Modern equipment (2)
2. Well trained (6)
3. Provide outstanding customer service (3)
4. Professionalism
5. Excellent emergency services/response (5)

As a result of the responses that were provided by the participants of this survey, the department found that much of the services that are being provided coincide with the expectations and priorities of the department. While meeting the expectations of every individual stakeholder obviously cannot be achieved, the information that is provided is an invaluable resource that helps the department to develop specific qualitative and quantitative performance goals for the department. As the fiscal, physical, and political resources are available to develop these expectations, the department will do so in a manner that provides an equal and adequate level of service to all members of the community.



Component D: Community Risk Assessment and Risk Levels

Risk Assessment Methodology

Methodology

To meet community expectations, on scene operations require an effective response force within an established response time in order to control the various risks found within our community. Determining service level objectives requires a study of staffing levels, the number of apparatus needed, and the tasks to be performed at emergency incidents by fire and medical personnel. Determining critical tasks is an essential requirement used to determine appropriate staffing levels. The dynamics of fire growth and the time for resources to arrive on scene is paramount to controlling the effects of fire. Of equal importance are the time intervals of first responders to medical emergencies, hazardous materials, and rescue emergencies.

Dynamics of Fire

Fire suppression forces are met by a variety of condition during each fire incident. If the arriving suppression force is to save lives and limit property damage, they must arrive within a short period of time, with sufficient resources to control the growth of the fire. Regardless of the spread of fire growth or length of burn time, fires will go through the same stages of growth and decay. A specific stage emerges as very significant because it makes a critical change in conditions. This specific stage is referred to as a **Flashover**. Listed below are the industry accepted phases of fire development, which consist of four stages for a fully developed fire. Flashover is a critical stage of fire growth for two reasons. First, no living thing in the room of origin will survive, so the chance of saving lives decreases dramatically. Second, flashover creates a rapid jump in the rate of combustion and fire spread, so a significantly greater amount of water is required to reduce the burning material below its ignition temperature.

A post flashover fire burns hotter and moves faster compounding suppression and rescue efforts in the structure. Consequently, more personnel and equipment are needed to stabilize the incident.



Arrival of resources before the flashover stage can speed rescue efforts, and limit fire spread to the area of origin. A post-flashover fire requires more personnel and equipment to control and contain. To summarize, the stage of a fire affects staffing and equipment needs. Both can be predicted for different risk levels and fire stages. The ability to correlate staffing and equipment needs with a fire's stage of growth is the basis for a ***standard of response coverage analysis*** by a fire department. Nevertheless, it is unreasonable to expect a fire department to reach all fires before flashover, even in the most heavily staffed and best equipped department.

Stages of Fire Development



- 1.) **Ignition-** Ignition describes the period when a heat source is applied to combustible fuel, combined with the presence of oxygen and a continuous chemical chain reaction. At this initial stage the fire is small and generally confined to the material first ignited.
- 2.) **Growth-** Soon after ignition, a fire plume of smoke, flame, and heated gases begins to form and extend above the burning fuel. As the heated gases rise, they begin to spread upward and outward into the environment. As the fire extends and the environment continues to heat up, additional fuels are ignited thus extending the fire. The growth stage will continue to as long as there is enough fuel and oxygen available to consume. Fires in the growth stage within compartments are generally fuel controlled. As the fire grows, the overall temperature in the compartment increases, as does the temperature of the gas layer at the ceiling level.



- 3.) **Flashover**- Flashover is the transition between the growth and fully developed fire stages, and is not a specific event, such as ignition. During flashover, the conditions in the environment change very rapidly, and the fire changes from a dominant material fire to one that involves all of the exposed combustible surfaces within the environment. As the heat increases in the environment, the exposed surfaces reach their ignition temperature and flashover occurs suddenly. The smoke filled room bursts into flames and rapidly escalates into a fully involved fire. Flashover has killed many firefighters and they are at an extreme risk just prior to the event. The most dangerous phase of a fire's development is when it transitions from the growth to the fully developed stage. Flashover signals the transition into a fully developed fire.
- 4.) **Fully Developed**- The fully developed stage occurs when all combustible materials in the environment are involved in the fire. During this time the burning fuels are releasing the maximum amount of heat possible for the available materials, and producing large volumes of fire gasses. A fire at this stage requires significantly more resources (water, hose, and personnel) to control due to the massive amount of heat energy involved. Also during this stage, hot unburned fire gasses are likely to begin flowing from the compartment of origin into adjacent spaces or compartments. These gases ignite as they enter the space where air is abundant, causing the fire to advance further.



Fire Spread

Heat transfer is the most common method of fire spread. Heat from fire is transferred in three basic ways: conduction, convection, and radiation. Routes of fire travel are often the movement of flames or super heated gases through open doors, stairwells or shafts, and by direct exposure through open windows.

- 1.) **Conduction**- Conduction is the transfer of heat from one body to another through direct contact. In general, heat transfer early in the development of all fires is due to the flames making direct contact with the combustible material.
- 2.) **Convection**- Convection is the transfer of heat energy by the movement of heated gases or liquids. When heat is transferred by convection, there is movement or circulation of a fluid, liquid or gas. Heat flows from a warmer area to a cooler area. An example of this is when you hold your hand over a candle and feel the heat.
- 3.) **Radiation**- Radiation is defined as the transmission of energy by electromagnetic waves. The energy travels in a straight line at the speed of light. An example of radiation is the sun warming the earth. Heat transfer by radiation is a major fire spread problem at large fires.

Pre-Flashover

Limited to area of origin

Requires smaller attack lines

Search and Rescue is easier

Initial companies can handle incident

Post Flashover

May spread beyond area of origin

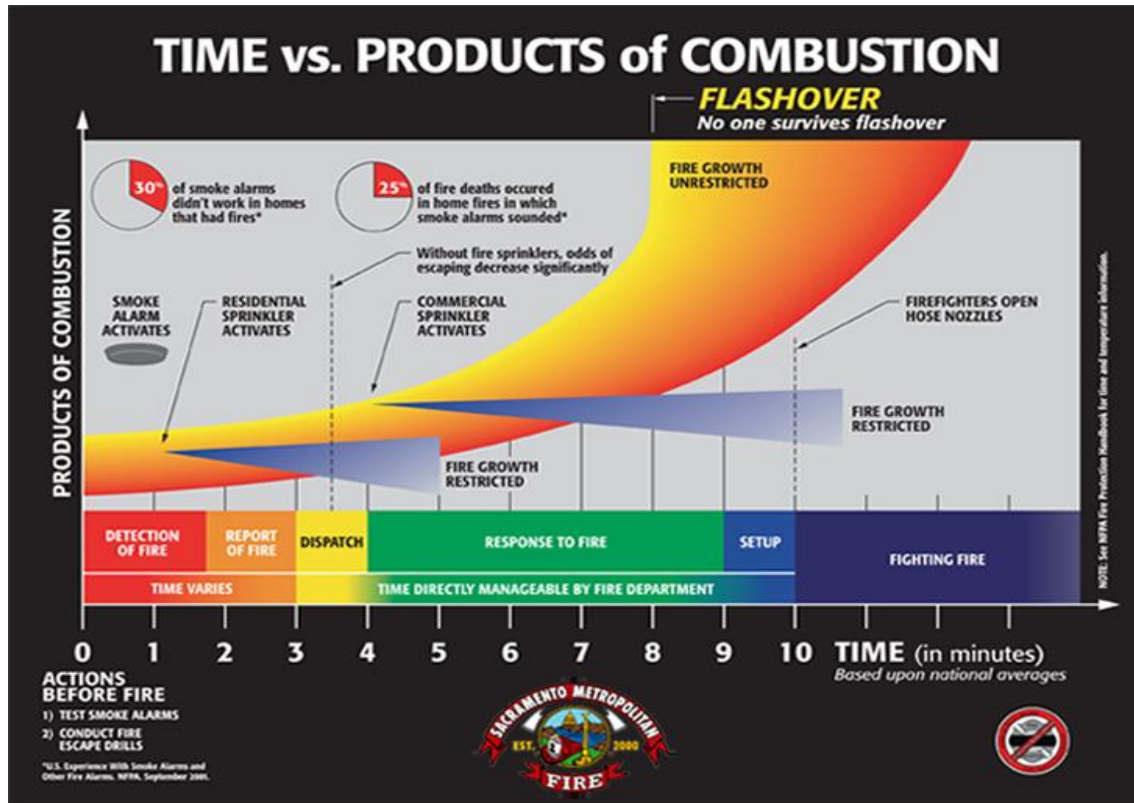
Requires additional and larger attack lines

Search and Rescue is more difficult

Requires additional companies



TIMELINE OF FIRE PROGRESSION



The previous graphic shows the relationship of time and fire growth. Depending on the amount and combustibility of a room's contents, it will reach the flashover point anywhere from six to ten minutes after reaching the free burning stage. It is important to remember that even if the fire is reported at the beginning of the free burning stage, it is highly likely that the room of origin will be at the flashover stage prior to the arrival of the fire department. Upon arrival it takes even more time to set up hoses and begin an attack on the fire. By this time it is critical that rescue and fire fighting resources are placed into service safely and efficiently to save lives and keep the fire from extending to unburned areas of the structure.



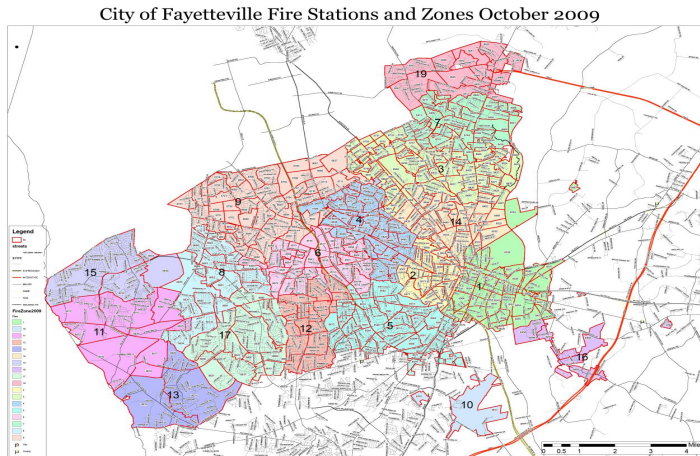
The community's expectation may be for the fire department to arrive at all fires prior to the flashover stage. The reality is depending on department resources and notification time, that some fires will have reached the flashover stage before the arrival of the fire department. The value of sprinkler systems, especially residential sprinkler systems, can drastically slow down the fire from reaching this stage. These systems not only buy critical time for victims to escape but it also buys time for the fire department to initiate effective firefighting tactics.

This deployment cannot be solely based on fire incidents, but must also include an effective response force to Medical, Technical Rescue, and Haz-Mat emergencies. Similar to reaching a fire before flashover occurs: When responding to other emergencies such as medical calls, reaching a patient before irreversible brain damage or death occurs is equally important. However, in relation to fire-ground operations, the challenge for fire departments today is to provide an effective response force that is capable of deploying firefighting tactics in a timely manner to prevent flashover and reduce the likelihood of injury. A fire company, once on the scene of a fire incident, must accomplish a variety of tasks simultaneously if lives are to be saved and property losses are to be kept at minimum. This requires that tasks be completed within a short period of time, with adequate resources. Specific performance measurements, like travel times, are not difficult to obtain, and will indicate how long is required for deployment resources to arrive on scene at fire or medical emergencies.

Performance capabilities of a fire department aren't easy to interpret. The tasks vary based on the specific type of emergency and number of tasks required to stabilize that incident. Large fires or complex medical emergencies require a greater number of resources, whereas a single room and contents fire, or single vehicle accident require less equipment and personnel. To provide a valid comparison of a fire departments capability, one must evaluate possible threats, operational tasks, station locations, built in fire protection, existing staffing options, required flows to extinguish fires, and risk level.



A complete risk analysis must be conducted to ensure that adequate resources are available for all levels of responses within the departments identified response boundaries.



TOTAL RESPONSE TIME

Time has many meanings in the fire service, and it must be clearly defined. It also needs to be determined if the response time is based on statistical averages or fractals. Performance measurements tracking only travel time do not consider the other tasks such as processing and handling the 911 call, notification of the responding unit, time for the company to begin their response, and the time it takes for the crew to arrive on scene. The total of all of these phases is known as the “Total Response Time”. When a call for help is initiated, the total reflex time begins when the call is first processed and ends when the crew arrives on scene.



CASCADE OF EVENTS

There is a cascade of response events that begin with a state of normalcy where there is no emergency and extends through the termination of the incident. When an event occurs, the degree of loss of life and property is directly related or impacted by the passage of time. The benchmark for a fire department to gauge or evaluate their response criteria is the Cascade Response Elements of:

911 Call Processing Time

Turnout Time

Travel Time

These three factors form the baseline for evaluation in responding to calls for service, and are manageable by the department through performance standards. The steps in the Cascade of Response Elements can be further reduced into three management responsibilities:

Pre-Response

Response

Incident Command

The pre-response is the responsibility of the property or building owner and includes fire prevention measures and proper implementation of fire and building codes. Response is primarily the fire chief's responsibility in providing an effective response force. Incident command is the person responsible for mitigation of the actual incident. The Commission on Fire Accreditation International (CFAI) has defined response time elements as a cascade of events. This cascade is similar to that used by the medical community to describe the events leading up to the initiation, mitigation, and ultimate outcome of a cardiac arrest. It is imperative to keep in mind that certain intervals described, such as turnout and travel time can be directly influenced by the fire service via station locations, staffing levels, as well as local rules and procedures for response.



Others factors, such as the alarm interval, can be influenced indirectly through public education and engineering initiatives. The fire service can also influence the call-processing interval through its ability to define standards and compel performance by its dispatch centers.

Careful definition of terminology is essential to any conversation about response performance standards. It becomes even more critical when an organization attempts to benchmark its performance against other providers. The following definitions are standardized for discussion of response performance parameters within the Fire Service:

- 1.) **Event Initiation**: The point at which factors occur that may ultimately result in an activation of the emergency response system. Precipitating factors can occur seconds, minutes, hours, or even days before emergency event awareness is reached. An example is the patient who ignores chest discomfort for days until it reaches a critical point at which he/she makes the decision to seek assistance (**emergency event awareness**). It is rarely possible to quantify the point at which event initiation occurs.
- 2.) **Emergency Event Awareness**: The point at which a human being or technologic “device” (i.e., smoke detector, heat detector, etc.) becomes aware that a condition exists requiring an activation of the emergency response system. This is considered the emergency event awareness.
- 3.) **Alarm Interval**: The measured time between emergency event awareness and the alarm time.
- 4.) **Alarm Time**: The point of receipt of the emergency event at the Public Safety Answering Point (PSAP); the point where sufficient information is made known to the dispatcher so that applicable units can be deployed to the emergency.



- 5.) **911 Call Processing Time:** The first ring of the 911 telephones at the dispatch center to the time the Computer Aided Dispatch (CAD) operator activates the station alert tones. This can, if necessary, be broken down into two additional parameters: “*call taker interval*” (the interval from the first ring of the 9-1-1 telephone until the call taker transfers the call to the dispatcher), and “*dispatcher interval*” (the interval from the time when the call taker transfers the call to the dispatcher until the dispatcher (CAD operator) activates station and/or company alerting devices).
- 6.) **Dispatch Time:** Is the time when the dispatcher, having selected appropriate units for the response with assistance from the CAD system, initiates the notification of response units.
- 7.) **Turnout Time:** Is the time from when the stations are notified of an emergency to the point the company has acknowledge they are en-route to the scene. (Wheels rolling)
- 8.) **Travel Time:** Measured time between turnout time and on scene time of initial company.
- 9.) **On Scene Time:** The point at which the initial company arrives on scene.
- 10.) **Initiation of Action:** The point at which operations to mitigate the event begin.
- 11.) **Initial Full Alarm Assignment Interval:** Measured time between initial company on scene time and arrival of the balance of the Initial Full Alarm Assignment.
- 12.) **Initial Full Alarm Assignment:** Time when all of the personnel, equipment, and resources ordinarily dispatched upon alarm arrives on the scene.



- 13.) **Response Time:** The combined measured time from dispatch time, and includes turnout and travel intervals, to initial company arrival time.
- 14.) **Controlled Time:** The point at which fire growth has been stopped and/or when initial basic life support concerns have been addressed.
- 15.) **Termination of Event:** The point at which units have completed the assignment and are available to respond to another request for service.

The department has sufficient equipment and personnel resources available to deliver services to its citizens. Engine and truck companies along with rescue companies, haz-mat units, and other specialty units are available for responses to emergency incidents throughout the city from 16 fire stations. When an emergency 911 call is received at the communications center, the public safety dispatchers verify the caller's location utilizing the computer aided dispatch system and establishes a call for service in which the appropriate units are then dispatched. The Company Officer or Battalion Commander can either upgrade or downgrade responding units based on dispatch information, or any additional information that becomes available.

The department utilizes response categories with associated levels to emergency incidents based on the call for service. There are four category types of emergency responses. There are also three levels of responses for each category. Each level increase signifies additional resources are needed to mitigate the incident.

Response Category Type

Response Levels

- | | |
|-----------|-----------------------------------|
| • Fire | Low, Moderate, High |
| • Medical | Level I, Level II,, and Level III |
| • Haz-Mat | Level I, Level II,, and Level III |
| • Rescue | Level I, Level II,, and Level III |



It is known that the variables of fire growth dynamics and property/life risk combine to determine the fire ground tasks that must be accomplished to stop the loss. These tasks are interrelated but can be separated into two basic types, **fire flow** and **life safety**. Fire flow tasks are those related to placing water on the fire. Life safety tasks are those related to finding trapped victims, removing them to safety, and initiating patient care.

Fire Flow tasks can be accomplished with hand held hose lines or master streams. The decision to use hand held hose lines or master streams are contingent upon the fire stage and the threat to life safety. If the fire is in a pre-flashover stage, fire fighters can make an interior offensive fire attack. In addition to fire attack, hand held lines are used to shield trapped victims until they can be removed from the **Immediate Danger to Life and Health** (IDLH) atmosphere. In an offensive attack, the department uses 1¾" and 2½" hose lines, both requiring a minimum of (2) two fire fighters. If the fire is in the post-flashover stage and structural damage is a threat to the Firefighters' life safety, then the structure is declared unsafe for interior operations and master streams are employed to confine the fire and protect exposures.

The life safety tasks are based upon the number of occupants, their location, their status, their ability to take self-preserving actions and the stage of the fire. It is the Incident Commander's decision when to use an **offensive** or **defensive** strategy. The primary goal of this department is to preserve human life, stabilize incidents, and preserve property by limiting the forces of fire. Therefore, the City of Fayetteville Fire/Emergency Management Department performs aggressive offensive fire attacks whenever possible.



Planning Areas/Zones

The City of Fayetteville along with every other municipality across the board has variations of risk that present or has the potential to present a dramatic impact on the social, business, and geographical realm of their respective boundaries. With this in mind, it came out of sheer necessity for the Fayetteville Fire Emergency Management Department to conduct a Risk Assessment for the entire City. It is the intent of this section to provide a description of the scope, complexity, and relationship of the various areas that pose risk factors within the City of Fayetteville. During this process, several approaches were utilized in order to ascertain a true level of risk throughout. By applying physical, theoretical, and software assisted data accumulation, the department was able to accomplish this daunting task.





Both the structural and non-structural risks were included in this evaluation. The non-structural risks include emergency medical, hazardous materials, technical rescue, natural, and man-made disasters. The structural risks include the typical structures found throughout the City of Fayetteville. They include buildings such as multi-story buildings, schools, assisted living facilities, healthcare facilities, historic buildings, storage, commercial, and governmental facilities. The information analyzed during this assessment was cross referenced with the demographics of the City and utilized to determine the department's ability to effectively provide adequate resources at any given time.

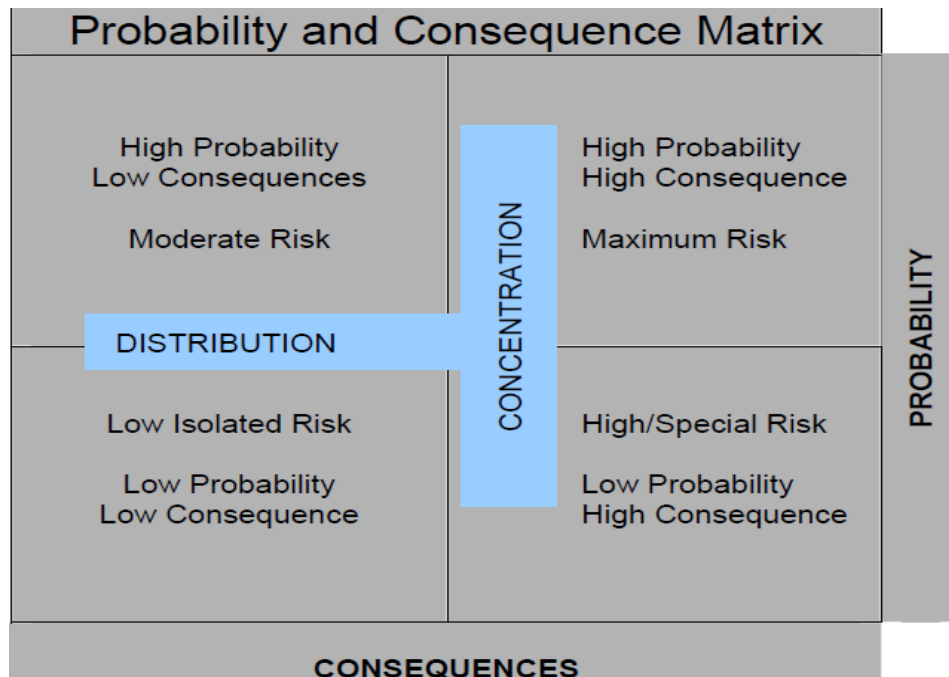
The use of the Probability and Consequence Matrix was one of the most significant resources that were used during this process. Once the risks were identified, the determination as to what level of risk there was, proved crucial in completing the assessment. With this matrix, there are a minimum of four possible relationships between structures or conditions and the distribution and concentration of resources. Chart D.1 provides a description of the matrix.



Probability/Consequence Matrix

Chart D.1

-  **Low Probability, Low Consequences = Low Risk**
-  **High Probability, Low Consequence = Moderate Risk**
-  **High Probability, High Consequence = High Risk**
-  **Low Probability, High Consequence = Special Risk**

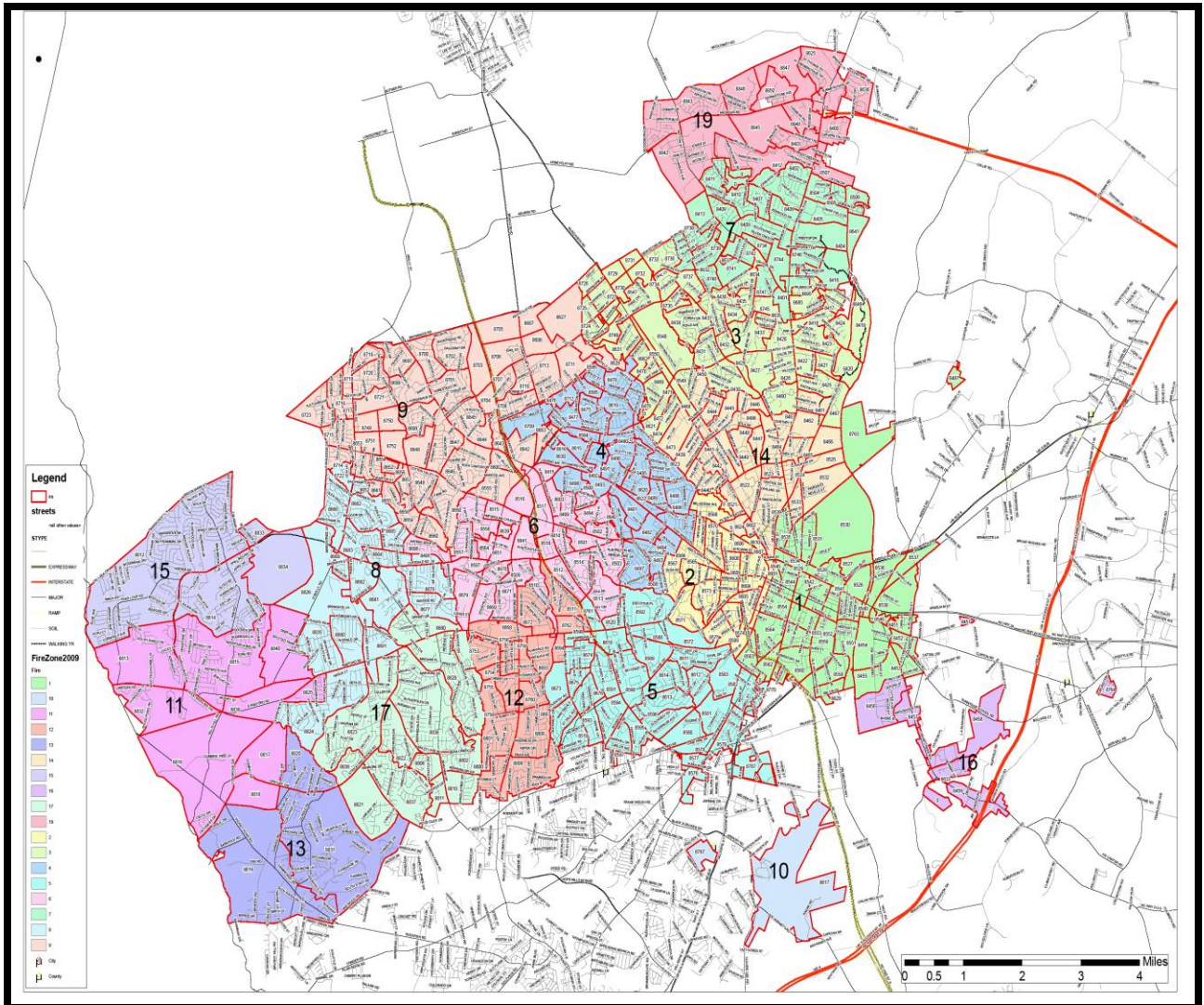




To identify and quantify the risks, Fire Response Zones have been established within the City of Fayetteville. These zones are utilized for Engine Company territorial assignments for the initial unit and then the next closest unit available. These zones were the basis of the department's further identification of over four hundred smaller geographical areas within each response zones called Geo-Proximity zones. These smaller zones allows for even more detailed analysis of historical call data and incident trends. The benefit to this would be for a station that has a district with a large residential population in one section and then a more commercial development with several high risk buildings in another area. The use of these zones and data collection was collaborated with other pertinent information such as population densities, and other data. The use of this data allowed the department to develop location specific data that when formulated provided the department with a better perspective of how well the department was prepared for handling identified risks throughout the community. Map D.2 illustrates the sixteen primary response zones and Map D.3 shows the Geo-proximity sectors of the city.

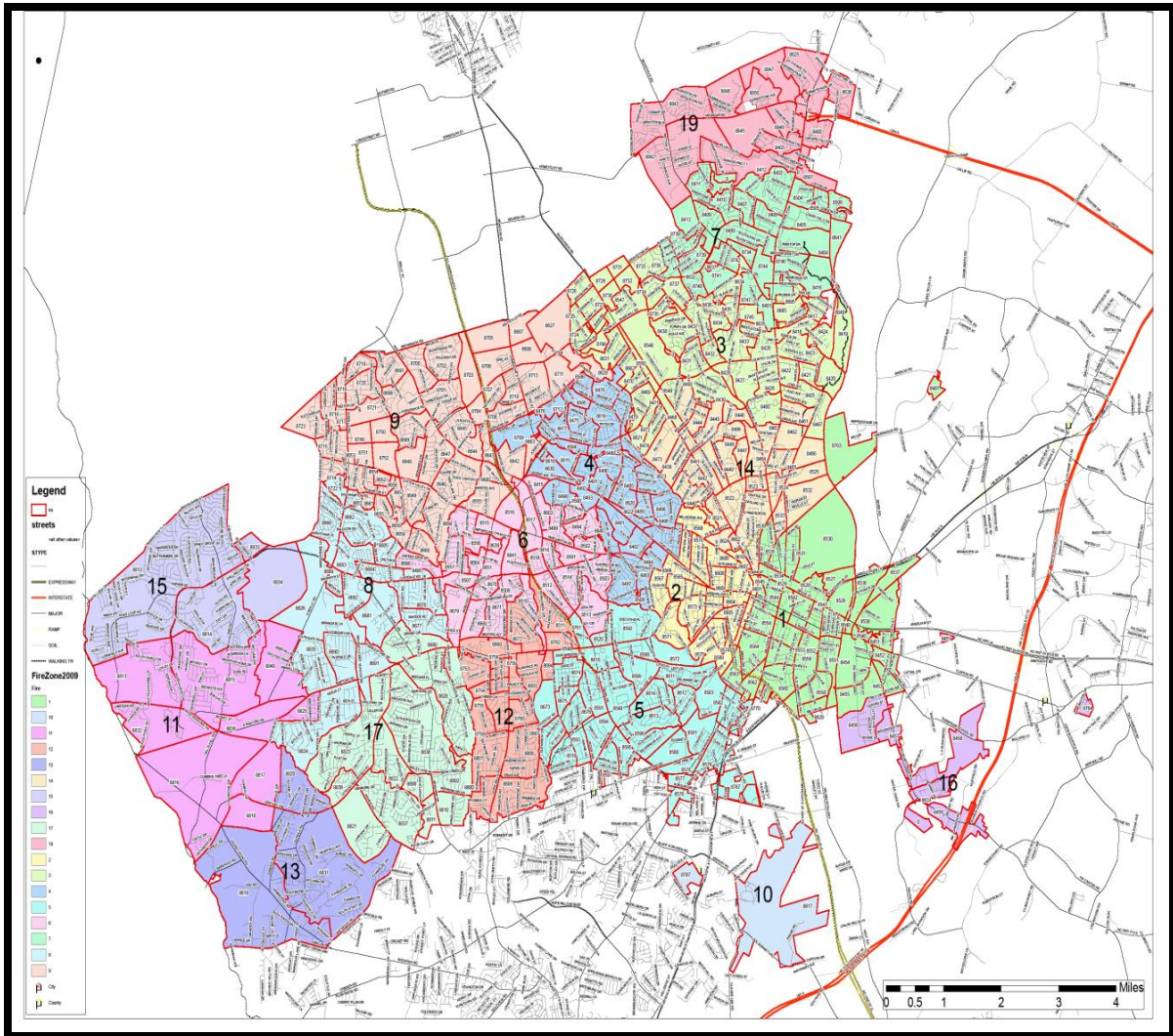


Map D.2
Primary Engine Company Response Zones





Map D.3
Geo-Proximity Zones





Risk and Location Factors

Geospatial

During this process, an analysis of risks was prepared with the intent of illustrating the relative risks for each geo-proximity zone throughout the City of Fayetteville. A list of natural hazards that could, or historically have, affected the area around the City was created. The Cumberland County Hazard Mitigation Plan was a major resource that was utilized to assist the department in identifying these hazards. Eleven potential hazards were identified and provided a risk factor/probability of 1 – 4, with 1 being the least likely to occur and 4 being the most. The following is a list of the identified natural hazards that were considered to be a probability.

Score	Likelihood	Location	Impact	
1	Seldom	Isolated	Localized	
2	Possible	Confined	Limited	
3	Likely	Significant	Moderate	
4	Highly Likely	Widespread	Extreme	
Hazard Type Index	Likelihood of Occurrence	Location of Impact	Impact of Hazard	
Hurricane	Likely	Moderate	Limited	2.7
Tornadoes	Likely	Moderate	Negligible	2.4
Thunderstorms	Highly Likely	Moderate	Negligible	2.6
Droughts	Likely	Mild	Negligible	2.6
Severe Winter Storm	Likely	Moderate	Negligible	2.1
Extreme Heat	Highly Likely	Moderate	Negligible	3.4
Wildfires	Likely	Mild	Negligible	2.4
Flooding	Possible	Moderate	Negligible	2.3
Earthquakes	Possible	Mild	Negligible	NA
Volcanoes	Unlikely	Mild	Negligible	NA
Tsunamis	Unlikely	Mild	Negligible	NA



Hazardous occupancies within each geo-proximity sector were included as well in the analysis. Each business within the City of Fayetteville was assigned a Property ID that was based on a set of pre-determined Hazard Classifications. Based on those classifications, the businesses were given either a Moderate or High ID. Low hazards do not apply to any business or structures. With the ID in place, the department was able to associate their location into the geo-proximity layers and identify the locations and densities of these businesses. We were able to determine what areas within the City posed a higher risk as compared to others.

Additional risk factors were evaluated as well. These include transportation corridors for rail and highways along with the presence of hospitals, schools, and rest homes. Historic fire and EMS events throughout the entire City were also included and applied to the geo-proximity sectors. Data from the last three years was collected and combined to produce a risk factor in each geo-proximity sector based on the actual number of fire and EMS calls in each one.

Topography

Understanding the various land uses across the City are important when evaluating the level of Risk and developing Standard of Response Coverage Statements. Fayetteville, which is located on the western most portions of the Coastal Plains Region of North Carolina, is mostly flat land with some slight hills. The land use within the city limits consists of mainly residential, commercial, and industrial uses. The vegetation and foliage within the city serve mainly as an aesthetic in improving the look of the community. The following review of the topography and various land uses throughout will show how the City of Fayetteville has developed.



Single Family Residential

Single family housing makes up a significant stock of the building that is within the City of Fayetteville. Residential developed areas make up a large portion of the response districts within the department. Prior to the major annexations that occurred in 2005, much of the single family residential housing within the City was well established and had little room for further development. Since then the majority of the development has occurred around the outer limits and bordering communities. The most significant growth has occurred in the western portion of the City near the Fayetteville and Hoke County lines along the Highway 401 and Cliffdale Road areas. Thanks to the development of the I-295 bypass and the closure of the Fort Bragg access off of Bragg Blvd in the near future, there has also been some growth in community developments in the north eastern portion of the City. This growth is evident of the opening of Fire Station 19 off of Andrews Road. Without this station the department would not be able to meet the prescribed benchmark response times detailed later in this document.

Multi-Family Residential

Thanks to the inclusion of the population from Fort Bragg and the growth that has been experienced from BRAC, the need for multi-family residential units have remains as ever present as it has in the past. The number of multi-family units has been built nearly 2:1 over the last ten years when compared to single family units. Chart A.2, which is featured earlier in this document shows the trend of the permits for these types of units versus single family units from 2004 to 2008. Many of these structures are located in close proximity to major thoroughfares and commercial establishments. They are typically found in area that has a large open area and curvilinear street networks. Due to the large presence of military families located in the area, the possibility of having to be deployed or stationed at another base is always present. With this in mind, many of the people that live in Fayetteville elect to rent.



A large portion of the multi-family structures are rental units and therefore significantly supports the local need for multi-family dwellings. Example of these types of uses includes apartment dwellings (2, 3, 4, and 5+ units per structures) and group quarters (boarding homes, retirement homes).

Mobile home parks also make up a small portion of the developments within the City. These areas were documented during the assessment due to the typically close proximity that the units are placed to one another. In the event of a fire, there is a high probability that extension to multiple units could occur. However, the number of newly developed mobile home parks has been virtually non-existent over the course of the last several years.

Park and Outdoor Recreation

City parks account for a large portion of the recreational land use throughout the City. Festival Park is one of the premier parks located in Fayetteville. Totalling nearly 14 acres, Festival Park includes Festival Park Plaza; retail and commercial office building. The concert area/entertainment complex located at the north side of the park is about 4 acres and holds several thousand people. The concert area features a permanent restroom facility, concession stand, and a 2700 square foot stage with a professional lighting grid and control room to attract top-notch talent. Backstage holds two individual dressing room areas and a large group dressing room, perfect for the entertainment lineup the Fayetteville Dogwood Festival attracts. Festival Park is located along Ray Ave. in between Rowan Street and Maiden Lane in the heart of Downtown Fayetteville.

Another major attraction for hundreds every day is the Cape Fear River Trail. The Cape Fear River Trail is a 4 mile trail which runs from the Jordan Soccer Complex parking lot and ends at the Clark Park Nature Center's parking lot. This trail is filled with a blend of trees, plants and wide life and is used by walkers, joggers, and bikers.



This along with Festival Park and others located all throughout the City are crucial in identifying for the Risk Assessment process. With the numbers of people that are capable of gathering at any given time, an elevated level of risk often is a result for the department and its ability to provide adequate response and coverage.

Office Land Uses

Office land uses are located throughout the City with the main concentrations along commercially zoned districts. While these areas are spread throughout, larger sections exist along major thoroughfares such as Owen Drive where Cape Fear Valley Medical Center is located. Other major streets such as Ramsey, Skibo, and Raeford Road have numerous banks, medical, realty, and other office uses.

Government, Educational, Religious and Related Land Uses

Cumberland county schools, Fayetteville Technical Community College, Fayetteville State, and Methodist University and numerous religious facilities account for a the majority of the land designated for governmental and/or institutional. Out of the 87 Cumberland County Schools, 52 of them are located in Fayetteville. This accounts for high concentrations of people during certain times of the day. Other governmental offices such as City Hall and the Cumberland County Courts and Administrative offices are located in the downtown areas of the City. Examples of land uses within this category include post offices, police/fire stations, churches, and cemeteries.



Commercial and Related Land Uses

The majority of the commercial services are located along the major thoroughfares within the City. Roads such as Owen Drive, Raeford, Ramsey, Skibo, and Santa Fe. Much of the commercial services are well established in these areas. Raeford Road has experienced the most significant growth in recent times. With the growth that Hoke County has experienced, the demand for services has increases as well. A significant portion of the Hoke population commutes into the City on a daily basis. Examples of these types of land uses include shopping centers, convenience stores, and restaurants. With the development of the Interstate 295 By-Pass, the demand for more commercial uses is expected to increase significantly over the next ten years along Murchison Road and the north eastern most portion of the city along Ramsey Street.

Agriculture and Underdeveloped Areas

There are sporadic areas within the City of Fayetteville that have yet to be developed. However, the majority of agricultural and underdeveloped are located in rural areas in the County. Some of these areas border the City and will likely be incorporated into the City of Fayetteville through annexation. The Stoney Point community will be the next phase to be incorporated into the City. This area is located near the Hoke County line where the most significant growth is currently being experienced. The areas that are located within the city limits are appropriately zoned for future uses and as demand and growth of the city continue, these areas will eventually become developed. The vegetation and foliage within the city serve mainly as an aesthetic in improving the look of the community. In this region, there are arrays of hard and soft wood trees that add to the city's appeal.



Transportation Network

Fayetteville is well served by major highways and an exceptional street network that provides access to and around the City. The roadway system includes Interstate 95, national routes such as US 401 and 310, state highways such as Highways 87, 24, and 210, state routes such as the All American Freeway and the Martin Luther King Freeway, and an integrated network of City streets (i.e. Hay Street). Interstate 95 borders the eastern portion of the City and allows for the direct access in terms of response for the emergency situations that pertain to the City of Fayetteville and other areas throughout the state. Having this capability allows for swift response of the Hazardous Materials Regional Response Team 3 that provides assistance to neighboring counties in the event of an applicable emergency. US 410, 301, and Highways 210 serve as important routes around and through the City. These are primarily the main response routes for emergency vehicles and provide east to west and north to south access by circumventing the road network. These have also evolved into the major commercial areas of the City as well.

The Fayetteville Regional Airport also provides transportation in addition to the street network. The airport is located in the southern most portion of the City and is just off of Highway 301. Fayetteville Regional Airport is serviced by two main airlines: US Airways Express, with daily service to its Charlotte, NC hub and ASA, the Delta Connection, with daily service to its Atlanta hub. On a daily basis, there are approximately 1200 people either flying into or out of Fayetteville. Between the two airlines that operate out of Fayetteville Regional, this account for over 420,000 people annually.



The third major asset to the local transportation network is that of the rail system. There is one primary loading station that is serviced by Amtrak. It is located in the downtown district of the City along Hay Street. Today, there are five major rail systems that operate in the City of Fayetteville and Cumberland County. These are Aberdeen & Rockfish, Amtrak Cape Fear, CSX, and Norfolk Southern. Passenger and freight trains pass through the Hay St. station several times a day and travel between New York and Florida. The station services an average of 10,000 passengers embarking/disembarking annually. Several other Freight trains travel through the city on a daily basis as well. While these trains have little impact as they pertain to population, they do present an elevated hazard on a daily basis.

Climactic Conditions

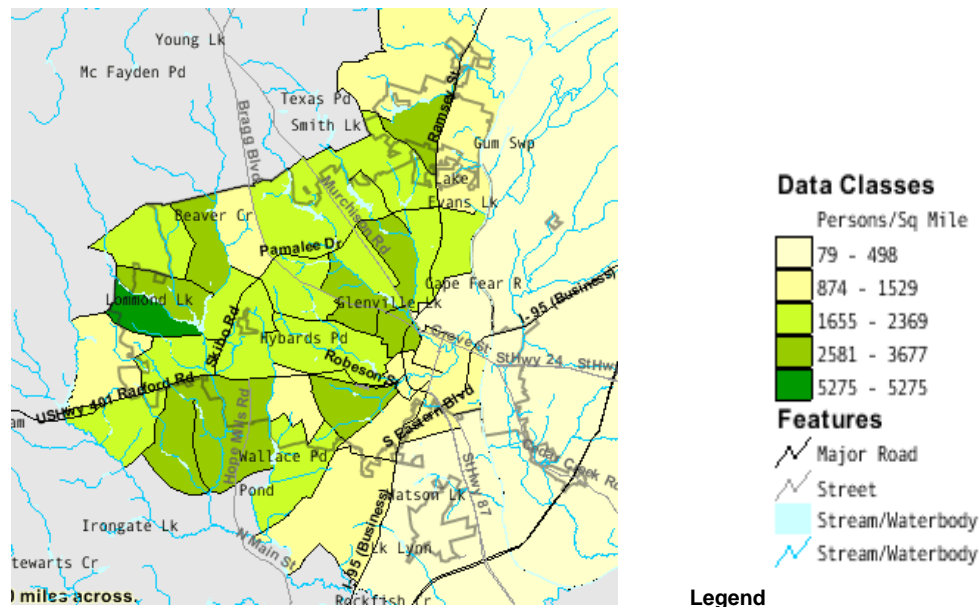
From time to time throughout the year, the climate has the potential to affect the level of response that the department is able to provide. On an annual basis, the city receives an average of 47 inches of precipitation. Accompanying this rainfall is often thunderstorm conditions. Thunderstorms account for the largest amount of climatic conditions that affect the department annually. As a result of the rainfall and lightning strikes from these storms, numerous alarms and emergency conditions can occur. Often time the available resources are stretched to its maximum capabilities. With this in mind and as a direct result of the Risk Assessment process, the department has incorporated a severe weather response plan into the Computer Aided Dispatch (CAD). During the winter months, the department will receive between two to three inches of snowfall annually. The accumulation of snow and ice can result in similar response problems as well. Over the years, the city has experienced several different weather related disasters that include hurricanes, droughts, wind storms, flooding, and winter storms. With the assistance of the departments Emergency Management Officer, plans have been established in order to mitigate and provided adequate responses for these types of conditions.



Population

When performing a risk assessment of the community served, having an accurate account of the total population is crucial to the completion of the process. Despite that the actual numbers for the population of the City of Fayetteville are only conducted every ten years, a close and accurate prediction of the actual population can be determined. Based on trends such as previous census's, average growth, and other resources, the number of people living within the City of Fayetteville can be determined. These numbers are crucial in the sense that these population characteristics provide important information about the size of the population, population growth rate, and population composition by age, race, and education. The population densities weigh in on the process as well. Between the department's sixteen response districts there are varying densities throughout. The following map D.4 provides a description of these densities from the 2000 U.S. Census.

Map D.4



Combining Fayetteville and Fort Bragg, the estimated population for 2009 totaled 207,445 residents. Looking back at the 1990 and 2000 U.S. Census Reports, Fayetteville has experienced an annual growth rate of approximately 6% over the course of the



previous two Census Reports. Utilizing this information it is clear that the current estimated population is right in line with previous figures. Fayetteville's population accounts for 66% of the metropolitan population. The density of the population can be measured in persons per acre. The population concentration for the city is 2,207 people per square mile (excluding land for Ft. Bragg). Provided the current population trends continue, the demand for new housing will continue to rise not only for the City of Fayetteville but the surrounding metro areas as well. It is estimated that over the next fifteen years, there will be a demand for over 15,000 new dwellings. The gross density at which these homes are built would have a significant impact on the future location and types of emergency services needed.

Growth and Development

The City of Fayetteville has experienced quite a significant amount of growth in the last twenty years. Based on census and demographic materials put out by the US Census Bureau the City has essentially doubled in size every ten years for the last two decades. The most recent growth that has been experienced is a direct result of the annexations from 2005 and the restructuring of the military bases through BRAC. Much of the economy continues to be supported by a large portion of the military, but because of the current foreign affairs, many have been deployed and a downturn in the economy has been reflective. Past increases in fuel prices and the relationship they have with all commodities have also caused additional strains on businesses. The industrial companies in the area have experienced extreme hardships over the last several years. It is because of the sheer size of the City of Fayetteville and Fort Bragg that the leading employers of the local economy are governmental service sector. Governmental jobs and retail jobs account for the two largest employers in our economy.

Table **D.5** lists the top five workforces by industry for this area. (Note that these are from the 2000 Census and new information will be supplied once the 2010 Census material is received.)



Table D.5
Workforce by Industry (2nd Qtr 2000)

	Workforce		Average Weekly Earnings	
	Number	Percent	County	State
Construction	5,552	5.0%	\$504.85	\$576.95
Government	31,184	28.1%	\$585.33	\$587.78
Manufacturing	12,322	11.1%	\$726.86	\$697.70
Retail Trade	25,774	23.3%	\$308.63	\$328.87
Service	23,063	20.8%	\$416.78	\$543.36

Despite the City of Fayetteville still having a strong governmental and retail workforce, because of the current economic downturn, the unemployment rate has seen some significant increases in recent months. Prior to the beginning of the recession of 2009, the unemployment had remained relatively low between four and six percent. There were two significant spikes in unemployment over the last twenty years. In June of 1991, the rate spiked to nearly 8% and then followed a downward trend until January of 2002 when it reached 7.7%. The current unemployment has remained between 8% and 9% for the last several months. This is mainly attributed to the current recession that began in the spring of 2008.

Despite the statistics with the unemployment rate and other issues regarding the economic downturn, the City of Fayetteville remains in an overall stable position. While the growth that has been experienced in the last couple of years hasn't been ideal, there still remains a promising outlook for the economy as a whole. With this increase in growth, the overall number of risks associated with the FFD response capabilities has



increased as well. The number of buildings/businesses, population, and vehicles on the roadways add to the probability that the services the FFD provides will be needed. As a result of this Risk Assessment process, the department has identified and classified these risks as they pertain to the needed level of response. We have also identified areas where calls for service are greater and require more resources as well as specific times during the day when resource requirements are at their peaks. It is through this Risk Assessment process, that the department is able to determine the resources needed to provide an adequate level of service and ensure that as the City of Fayetteville grows, the department does as well.

Fire Suppression Services

Probability Factors

Each year, the FFD compiles data on the responses covered over the previous years. This data is utilized to study trends, develop Strategic Plans, and identify areas within our organization that need improvement. In order to determine the probability factor of fires within the City of Fayetteville, a study of call statistics is conducted. As a result of these studies, it was found that fires only account for a small percentage of the number of calls responded to on an annual basis. Chart **D.6** shows that in 2009, only 4.38% of the calls responded to were actual fire calls. This is a slight drop from the previous year where 4.38% of the calls were fire calls. The 2006 and 2007 years accounted for 6.19% and 6.78% respectively. This is indicative of the typical trend in the fire service where the overall percentage of calls relating to fires is decreasing. By looking at the responses by each station, as it is indicated below in Chart **D.7**, the overall distribution of fires has seen little change over the last four years.

Station 14 is the only station that has shown any considerable increase in the number of fire calls. Station 7 saw the most significant drop in fire calls in 2009; but this was due to the opening of Station 19.



By utilizing the charts and figures that have been captured over the last several years, it is clear to see that the actual probability of fires and the impact that they have on the City of Fayetteville is being contained to a minimum. While future data will allow us to determine items as to the number of fires that were contained to points of origin and other useful information, the current property value/loss figures shows that the fire suppression program is able to supply an adequate response for fires. Chart D.7 shows a property saved percentage of 95.31%.

2006 Thru 2009 Incident Response Summary

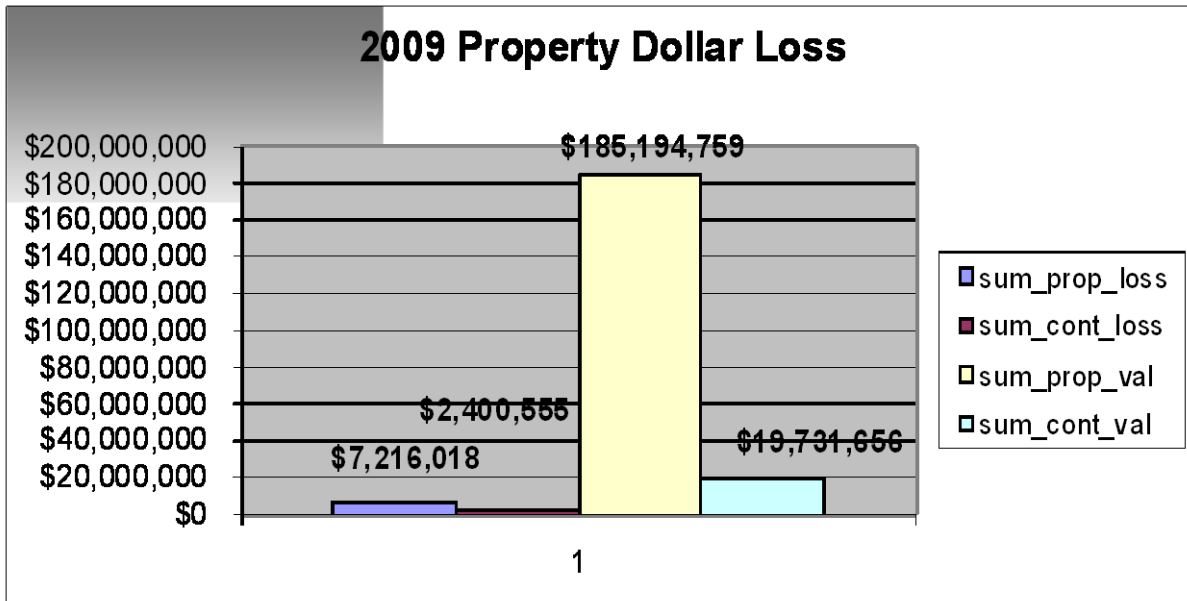
Chart D.6

	2006	2007	2008	% of 2008 Calls	% of 2009 Calls
Fire/Explosion	1170	1383	1092	4.82%	1018 4.38%
Overpressure/Rupture	31	25	23	0.10%	16 .068%
Rescue/EMS	13757	15093	17169	75.93%	17482 75.36%
Hazardous Condition	515	510	580	2.56%	582 2.51%
Service Call	603	641	748	3.30%	967 4.17%
Good Intent Call	1268	1264	1328	5.87%	1483 6.39%
False Call	1473	1424	1590	7.03%	1617 6.97%
Other Situation	65	39	78	0.33%	32 .138%
EMS call %	72%	74%	76%		75%
Total Responses:	18882	20379	22608	100%	23197 100%

Chart D.7

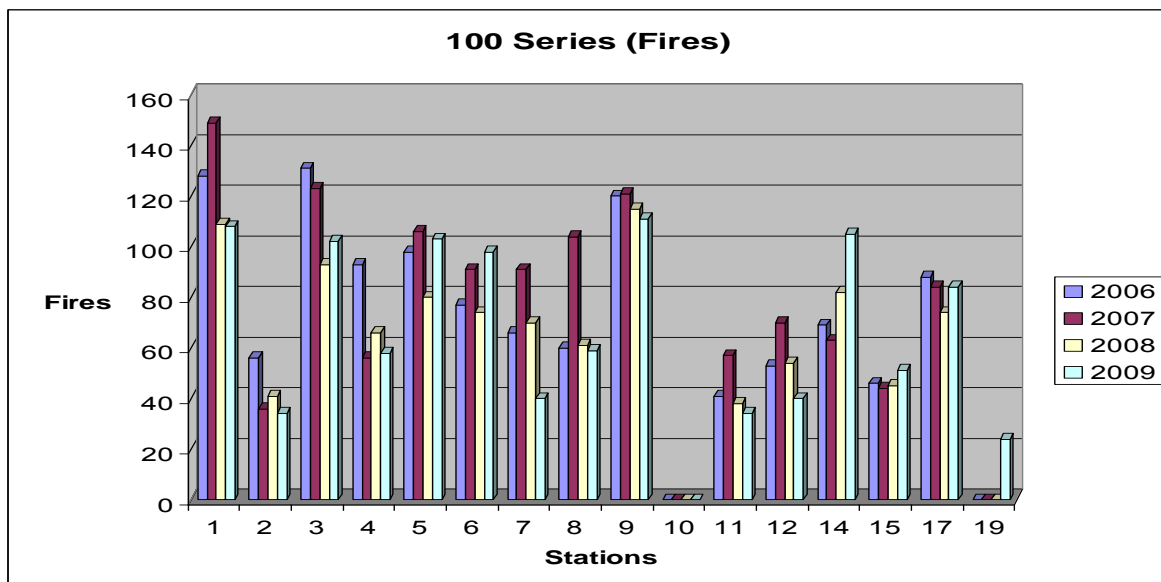


Fayetteville Fire/Emergency Management Dollar Save and Loss Analysis



2009 Property Saved Percentage **95.31%**

Chart D.8





Consequence Factors

While determining the probability of the occurrence of fire is an essential part of the Risk Assessment process, identifying the consequences of these fires is as equally important when attempting to plan and adjust to identifiable trends. Understanding the impact that a fire can have on one area of the City as compared to another is vital as it pertains to resource management. Theoretically speaking, restoring a state of normalcy to a residential structure fire with a single family of three to four people living in it can be achieved with fewer resources and doesn't pose as great of a potential consequence as an apartment complex that houses several hundred people. The potential loss of life, income to the economy and tax basis for the City is going to be considerably higher with the apartment building. The amount of resources to return this type of building to a state of normalcy will be considerably greater.

The determination of these consequences was determined by utilizing several methods of data capture. When identifying these consequences, there are several considerations that must be given. Emphasis must be placed on things such as community values, impacts, necessary resource availability, and other similar issues. The implementation of the Risk Analysis Hazard Classification, as mentioned earlier was a significant means of identifying the magnitude of resources needed to effectively provide resources for each business in the event of a fire. Accompanied with the ability to develop Hot Spot Mapping and other GIS focused resources, the FFD has been able to determine the areas with the City that if affected by a fire could pose the most significant impact. One example would be; that based on the current charts, in 2009, Station 6 was the 6th busiest station for responding to fires (98) with the City of Fayetteville. When compared to Station 17 who was the 7th busiest for fire calls (84), the possibilities of consequences in Station 6's area are considerably higher. The number of multifamily occupancies and commercial businesses are considerably greater than compared to Station 17, which is a primarily single family residential district. The tax basis for the City of Fayetteville is also higher in the Station 6 area.



Loss of revenues, especially during the current economic status could cause serious problems to the infrastructure of government.

Classification Methodology

During the process of identifying and classifying the fire risk within the service area, the department utilized a combination of both statistical and geographical data to assist in the planning processes for the organization. With this information collected, the department assessed potential risks within the community, identified areas that are experiencing growth or expansion, and developed organizational goals.

The primary focus of this process was to conduct a complete Risk Assessment of all businesses and commercial structures within the applicable area. In doing so, the department was able to gain a true understanding of what level of risks were spread throughout the City. These risks were divided into three distinct groups which assisted the department in determining the level of response needed in the event of a fire. The initial development of the criteria for the Risk Assessment was done so through the Risk, Hazard, and Value Evaluation (RHAVE) software. However, as we began the initial calculations, it was found that the results from the program were not fully meeting the needs of the department. Many of the buildings were being listed as a moderate risk, when it was a consensus that these should have been considered a high risk. Through previous experiences and identified resource needs, it was determined that the department would need to make modifications to provide more accurate results. Therefore, personnel utilized the information from the program and developed a specific criterion to meet our departmental needs.



The following criteria were used to determine the level of hazard that each business presented.

Low Fire Hazard Response:

- Brush Fires
- Dumpster Fires
- Car Fires

Moderate Fire Hazard Response:

- Single Family Dwellings ≤ 3 stories
- Commercial Business Structures with Fire Protection System
- Mercantile/Retail Structures with Fire Protection System

High Fire Hazard Response:

- Schools
- Apartment Complexes ≥ 2 stories
- Rest Homes
- Hotels
- Hospitals
- Churches
- Warehouses
- Industrial Complex
- Structures ≥ 4 stories
- Structures $> 25,000$ Square Feet without Fire Protection Systems
- Structures with Occupancy Ratings > 150



The risk analysis hazard classifications are divided into low, moderate, and high risks. Moderate hazards, which account for the majority of the suppression demands, require a response of three engines, one ladder truck, one service/rescue unit, and one battalion commander. The High classifications require one additional compliment of each unit from the moderate level. When these assessments are performed, basic construction information is noted so as to provide the companies with a quick reference. Items included are things such as occupancy type, water supply, building construction features, fire protection systems, and special hazards related to hazardous material storage.

Other potential hazards such as means of egress issues, electrical deficiencies, and other structural problems are noted during the assessments. As a result of the Risk Assessment process, it was found that a moderate classification accounted for the most substantial amount of applicable buildings. Roughly seventy four percent (74%) of the building that are protected by the Fayetteville Fire/Emergency Management Department are classified as a Moderate structure. The remaining twenty six percent (26%) are considered to be High risk structures.

Critical Resource Analysis

The Critical Resource Analysis determines what resources are needed to accomplish the applicable tasks at the scene of an emergency incident. The City of Fayetteville Fire Emergency Management Department examined its current deployment levels to structure fires, rescues, haz-mat, and emergency medical responses. To extinguish a structure fire and save victims, there are many critical tasks that need to be performed in the initial stages of the incident. There are similar requirements for rescue, haz-mat, and medical emergencies.

When assigning personnel to complete critical tasks, firefighter safety is the highest priority. The second consideration is assigning an adequate number of personnel and additional resources so that these critical tasks can be completed safely.



Having a fully staffed fire company consisting of four firefighters to complete these tasks greatly increases effectiveness on the fire ground. To minimize the loss of life and property and account for firefighter safety, there must be an adequate supply of physical resources to accomplish certain critical tasks as they pertain to fire suppression, rescue, haz-mat, and EMS calls.

Physical resources are considered anything that is utilized in the mitigation of an incident and are available within the appropriate level of risk, response area, or planning zone. These resources as they relate to those required for fires consist of apparatus/equipment, personnel, communications/dispatch, and availability of water. Without these essential resources, the ability to effectively mitigate an incident would lag and the current annual trend of fewer and fewer fires would begin to rise. Currently the Fayetteville Fire/Emergency Department is able to maintain these resources. With sixteen fire stations spread throughout the City limits, there is a vast array of front line apparatus that are available to respond to any location in the City in a reasonable manner of time. The current front line units consist of 16 Engine Company's, 5 Truck Company's, and 6 Squad Units (2 of these are Heavy Rescue Capable) that are available to respond and deliver services for fire calls. The personnel count is divided into three separate shifts where each has total shift strength of 103 personnel. The total number of personnel for the department is 330. Some personnel are assigned to various administrative positions.

The FFD does not have any actual ability to control the communications center and the local water supply. While there is little say by the FFD in these two areas, personnel from our department, do have a close working relationship with the two organizations and often provide helpful guidance in meeting the needs of the department. The two are periodically assessed on the actual ability to supply the needed resources to the community. The FFD maintains a current ISO rating of "2". Included in this evaluation is an assessment of both the local water supply and communications center.



Both received excellent marks in their assessment and are capable of meeting the needed resources in the event of a fire. It is through the use of these resources that the department is able to effectively provide fire suppression capabilities throughout the City of Fayetteville. However, it is important to note the while the number of fires have decreased over the course of the last several years, the level of fire suppression services must be reflective of the growth of the City. If not then it is highly likely that the number of fires that are experienced on an annual basis will surely increase.

Critical Task Analysis

A fundamental concept of fire risk is associated with modern society. Public fire service organizations are expected to reduce the risk within their areas of jurisdiction by taking measures to prevent the outbreak of fires, limit the extent and severity of fires, provide for the removal or rescue of endangered persons, control and extinguish fires that occur within the jurisdiction, and perform other emergency response operations and delivery of EMS. The cumulative effects of preventive efforts, risk reduction and control, and fire suppression capabilities result in variable levels of risk to the jurisdictions and their residents. Involved in providing the means to control these risks includes a group of Critical Tasks that must be initiated to re-establish a state of normalcy to whatever incident the department may encounter. Fire Departments across the country take a similar approach in completing these tasks. Often times they mirror each other in the way that these tasks are carried out. These activities typically conform to nationally recognized, safe firefighting and emergency response practices that are established by such agencies as the National Fire Protection Association (NFPA) and Occupational Safety & Health Administration (OSHA).

In performing these tasks, there must be some form of determination as to exactly what works and what doesn't work for each department. Conducting a Critical Task



Analysis allows the department to determine what tasks need to be accomplished at the scene of an emergency.

The Fayetteville Fire/Emergency Management Department has examined its current deployment levels on numerous types and levels of emergency incidents we may respond to. Covered in the examinations were fire, medical, hazardous material, and rescue calls. Each of the categories was devised into three ascending levels, with more equipment and personnel added as the demand for the call grows. When determining the appropriate response for an incident the number one concern for everyone is safety. Ensuring that there is an adequate amount of equipment and personnel on the scene to safely perform the needed operations is of the highest importance for the department. However, due to staffing levels fluctuating throughout the department on a daily basis, all analyses were conducted utilizing the minimum number of personnel and equipment to safely perform emergency operations.

The following is a list with a brief explanation on the critical task that the Fayetteville Fire/Emergency Management Department completes during any given incident.

Attack Line – This is a hose line that is manned by at least two firefighters capable of delivering an effective fire attack. The hose line consists of a minimum of 150 feet in length, a minimum size of 1 ¾ inches, and capable of flowing a minimum of 150 gallons per minute. (2) A hose line with a minimum of 2 ½ inches in size and capable of delivering a minimum of 250 gallons per minute shall be used when it is found that the size of the fire demands larger amounts of water.

Back-up Line – This is utilized to assist the initial attack line in the event that the fire grows to a point that overwhelms the firefighters on the attack line or other problems hinder the advancement of the crew. This line is at a minimum equal size to the attack line being used.



Decontamination Group – This is a group of assigned personnel that consist of the Haz-Mat Team members and other additional personnel who ensure that everyone that has potentially been in contact with any given substance is decontaminated and all materials such as clothing and suits are placed in the proper containers.

Documentation/Research – During any incident, the proper research and documentation must be completed in order to efficiently record information. Professional and accurate reporting is a vital part of the job we must adhere to. Hazardous Materials and Rescue calls also require additional documentation and research to be conducted. Things such as air monitoring, time in the hot zone, wind direction and speed, and several others must be recorded in order to operate a safe incident.

Entry Group – This a group of assigned personnel from the Hazardous Materials Team that have specialized training on how to contain and control an incident from the designated “Hot Zone” of a hazardous materials incident.

Exposure Line – This line is used to reduce the risk of fire extension to adjacent and surrounding structures during a fire ground operation. At a minimum this is a 1 $\frac{3}{4}$ inch line capable of supplying 150 gallons per minute. A larger 2 $\frac{1}{2}$ inch or deluge gun could be used in the event that the fire is too large for the minimum sized line.

Incident Command – This is a system by which facilities, equipment, personnel, procedures, and communications are organized to operate with a common organizational structure designed to aid in the management of resources at emergency incidents.

Medical Group/Patient Care – These personnel have the responsibility of providing care to the sick or injured parties involved during an incident.

Personnel Accountability – During any incident, accountability is a primary concern. Having an accurate count of the number of personnel and their assigned location is vital when dealing with fire ground operations. The larger the incident the more of a need is generated. On Level III incidents, a specific person is assigned to the position.

Rapid Intervention Crew – A minimum of two personnel are assigned to stage in a ready position near the entry point of the involved structure. Their purpose is to provide



search and rescue for lost or injured firefighters inside of a structure. As more personnel and crews are assigned to the fire ground operations, the R.I.C. should grow with it.

Safety – The personnel assigned to this position is responsible for making sure that safe firefighting operations are being conducted.

Search/Rescue – A minimum of two personnel are assigned to this position and utilize techniques that allow the rescuers to identify the location of victims and to determine access to those victims in order to remove them to a safe area.

Support Group – The support group serves a vital function on the scene of a rescue operation. These personnel assist the technical groups with ensuring that the necessary equipment is readily available and that other major functions such as preparing ropes, stokes baskets, and other harnesses.

Technical Group – The personnel assigned to these groups are those who are trained in specialties such as confined space and trench rescue type incidents. Depending on the level of the incident there can be as little as one group with two personnel to having several groups with multiple personnel.

Ventilation – A minimum of two firefighters assigned to provide vertical and horizontal ventilation. Ventilation is a labor intensive and time consuming task that allows for the removal of smoke, heated air, gases, and other airborne contaminants from a structure and replacing them with cooler and fresher air.

Fire Hazard Critical Tasks

The Fayetteville Fire/Emergency Management Department (FFEMD) responds to a broad range of fires including single family homes, commercial and industrial occupancies, motor vehicle, and vegetation fires. During an event that includes a fire hazard, the response is dictated by the nature of the event. Fire responses are divided into three levels; low, moderate, and high. Low hazards which only require a single engine response, consists of smaller fires such as a light vegetation/brush fires or a small passenger vehicle fires. Moderate fires, are incidents that include residential homes and smaller commercial/retail structures. The first arriving unit will establish command and



provide an initial size-up of the observable conditions. The incident commander will then communicate with personnel as to the needs and assignments for the operations of the incident. Based on the charts listed below, a minimum of fifteen personnel are needed to achieve the critical tasks for a moderate fire risk.

The initial response for this operation shall consist of three Engines, one Truck, one Service/Rescue, and one Battalion Commander.

The high classification pertains to structures with occupancies greater than one hundred, large square footage area, and multiple families. These types of incidents place a much higher demand for resources and equipment. In order for the department to effectively mitigate and control this type of incident, it was found that a minimum of twenty-four personnel are needed. During these high hazard incidents, often times 2 ½ inch hand lines are used in the place of the smaller attack lines, multiple hand lines are needed, additional personnel to perform search and rescue is required, and other support for other vitals tasks on the fire ground increases.

Performance measures in the form of standards, as used by the Fayetteville Fire/Emergency Management Department, are employed to evaluate annual engine and truck company performance during evolutions, which replicate fire ground operations. Performance standards in turn provide the Incident Commanders with an indication of the time required to complete a fire ground evolution. Standards also provide a basis for company training, both individual and multi-company operations. At a typical emergency incident, there are many critical tasks that need to be performed quickly and safely by assigned companies. Tasks normally assigned to engine companies are usually different than those assigned to truck companies, but are performed simultaneously in support of incident operations. Tasks assigned to engine companies include laying water supply lines, advancing fire suppression hose lines of various sizes, pump operations, attacking the fire, and providing back up lines and exposure protection. Truck and Rescue



companies conduct searches for victims, ladder the buildings, force entry, ventilate secure utilities, check for fire extension, and assist with salvage and overhaul operations.

A thorough understanding of the multiple and simultaneous tasks that are required to mitigate an emergency incident leads to an understanding of why multiple units are dispatched to various types of emergencies. This also leads to an improved understanding of the department alarm structure and the advantages of additional resources to quickly and safely stop the escalation of fire. Listed below is a breakdown of the Analysis the department conducted for each level of fire hazard. They list the critical tasks and event procedures that need to be achieved during an operation along with the minimum number of personnel required. These events are conducted annually to ensure the critical tasks can be completed in the required amount of time.

Low Hazard Fire Analysis

(Dumpsters, Light Vegetation, Small Passenger Vehicles)

(Fire Officer serves a dual role under these situations)

This level of response consists of one Engine company.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine/Officer
Pump/Water Supply	1	1st Engine/Driver
Attack Line	1-2	1st Engine/FF & Officer
Total	3-4	Range 3 to 4 Personnel



Moderate Hazard Fire Analysis

(Single Family Dwelling, Commercial/Retail <= 25000 Sq. Ft.)

This level of response consists of three Engines, one Aerial apparatus, one Service/Rescue unit, and one Battalion Commander.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine
Pump/Water Supply	1	1st Engine
Attack Line	2	1st/2nd Engine
Back-up Line	2	2nd Engine
Search/Rescue	2	Service/Rescue
Ventilation	2	Truck
R.I.C.	2	Truck/3rd Engine
Exposure	2	3rd Engine
Battalion Commander	1	B/C Vehicle
Total	15	Range 15 to 17 Personnel



High Hazard Fire Analysis

(Schools, Churches, Apartment Complexes, Hospitals, Structures > 4 Stories)

(Structures >= 25,000 Sq. Ft., Structures with Occupancy Ratings > 100)

This level of response consists of four Engine companies, two Aerial apparatus, two Service/Rescue units, and two Battalion Commanders.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine
Pump/Water Supply	1	1st Engine
Attack Line #1	2	1st/2nd Engine
Attack Line #2	2	2nd Engine
Back-up Line	2	3rd Engine
Back-up Line	2	3rd/4th Engine
Search/Rescue	2	1st Service Rescue
Search/Rescue	2	2nd Service Rescue
Ventilation	2	1st Truck
R.I.C.	4	1st/2nd Truck
Exposure	2	4th Engine
Battalion Commander	1	1st B/C Vehicle
Safety (2nd B/C)	1	2nd B/C Vehicle
Total	24	Range 24 to 26 Personnel



Emergency Medical Services

Probability Factors

The Fayetteville Fire/Emergency Management Department, just as any other department across the nation has experienced the same affect when it comes to providing services for Emergency Medical calls. There has been a continuous increase in the demand for the service over the course of at least the last decade. While the demands for these services have changed, the department has seen minimal change in what programs we place the most emphasis on. While fire suppression capabilities are equally as important, placing an emphasis on gearing your department to provide more efficient services that are in relation to EMS should be as equally important. EMS accounts for roughly seventy five percent of the annual calls that are ran each year. With the annual call load for EMS calls quickly approaching the twenty thousand mark, the ability for patients to receive the best possible care is likely to decrease.

The fire department at this time only provides first responder care and relies on Cumberland County Emergency Medical Services for additional advanced skills and the ability to transport patients to the hospital. Despite the fact that the department has had success over the course of several years now by working with CCEMS, we have to determine at what point they can no longer meet the needs of the FFD along with the City of Fayetteville. When considering what is called “the golden hour” for patients, and the amount of time that our units have to wait on scene for a medic unit from CCEMS to arrive, often this “hour” is pressed to the limit or has already passed by the time the unit arrives at the hospital. Travel times are also an important factor while caring for a patient. With only one main location, that being Cape Fear Valley Medical Center, many of the response zones are considerable distances away and the routes of travel are through often heavily congested traffic areas. Chart D.9 shows the distance from each FFD fire station to Cape Fear Valley Medical Center. The estimated time of travel is also included. The locations of the stations themselves were used only to demonstrate a fixed



position within each response district. Actual distance and travel times will have some variations depending on the actual location of the call.

For example, Station 5 is located within a mile of CFVMC, but if the location of a call is located on the further most portion of the district then the distance and travel times will be considerably more.

Chart D.9

Distance and Travel Time to CFVMC per District

Stations	Distance	Estimated Travel Time
Station 1	5.36 miles	7 minutes
Station 2	3.15 miles	6 minutes
Station 3	7.31 miles	10 minutes
Station 4	5.99 miles	9 minutes
Station 5	0.56 miles	1 minute
Station 6	2.50 miles	3 minutes
Station 7	9.33 miles	14 minutes
Station 8	6.16 miles	9 minutes
Station 9	6.22 miles	8 minutes
Station 10	4.95 miles	8 minutes
Station 11	7.51 miles	10 minutes
Station 12	2.37 miles	3 minutes
Station 14	6.17 miles	9 minutes
Station 15	8.57 miles	13 minutes
Station 17	5.53 miles	8 minutes
Station 19	11.65 miles	17 minutes

The data that is captured on an annual basis is an essential tool in identifying the likelihood of an incident occurring. The following charts help in providing a visual



perspective of the distribution of calls throughout the City of Fayetteville. Provided that EMS calls account for the greatest percentage of our annual call load, studying multiple parameters of the information gathered is needed to ensure that resource management is sufficient. The overall call load in each response district has seen similar increases over the course of the last four years. Station 1, 5, and 9 account for the three highest response areas for EMS calls, but provided that all station have seen a steady upward trend, it is likely that all will continue to see increases. By studying other areas such as time frames in which these calls are dispatched and the average number of alarms in a day helps in further assessing the probability of call loads. Chart **D.10** shows that the most probable times of the day for a call to occur. The average number of alarms on a daily basis is approximately 64. With that in mind, by analyzing the peak times during the day for calls of service, the department is able to determine the areas in that are most likely to experience a demand in service along with when they will likely need it. This is a valuable tool when striving to utilize departmental resources to the fullest extent.

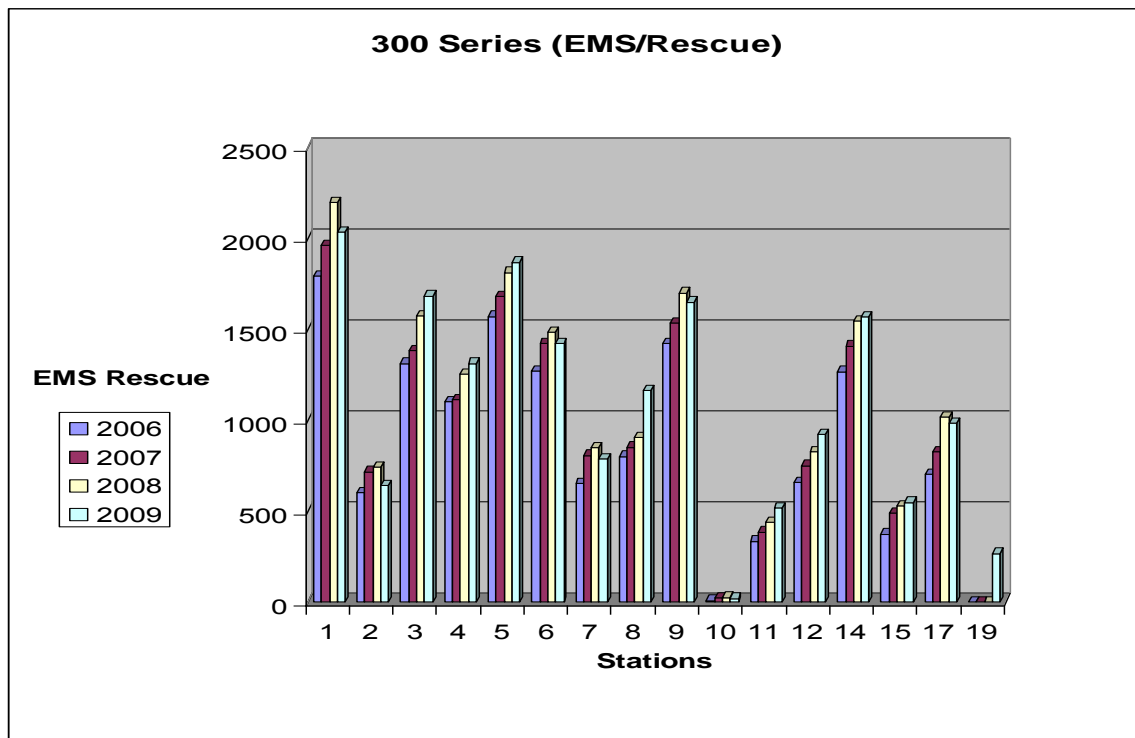




Chart D.10

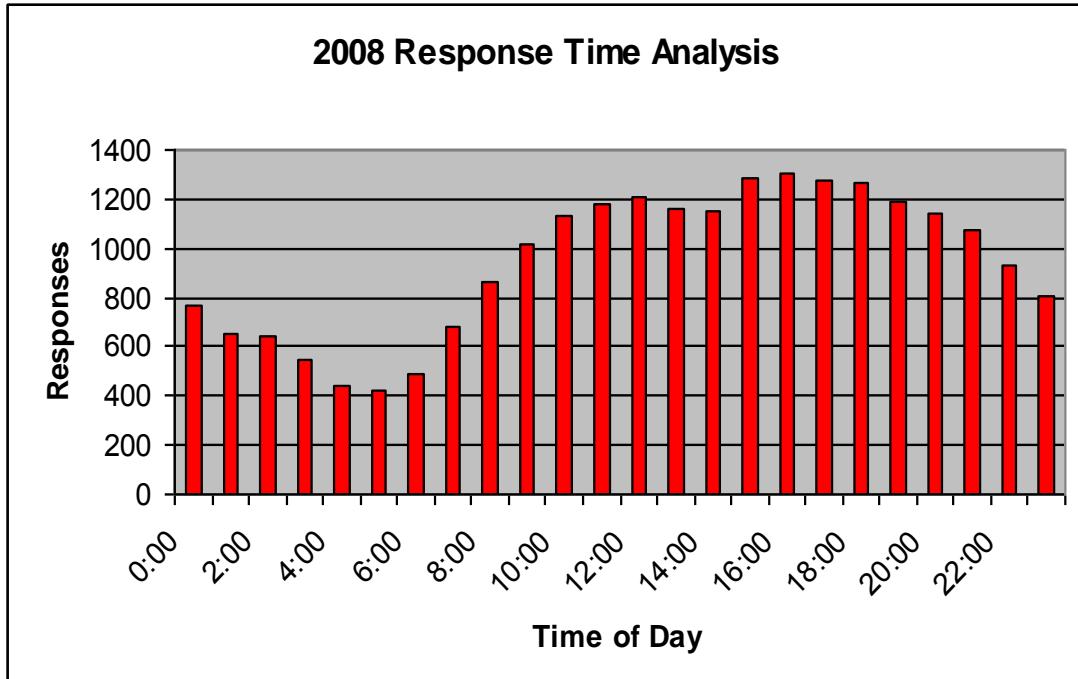


Chart D.11

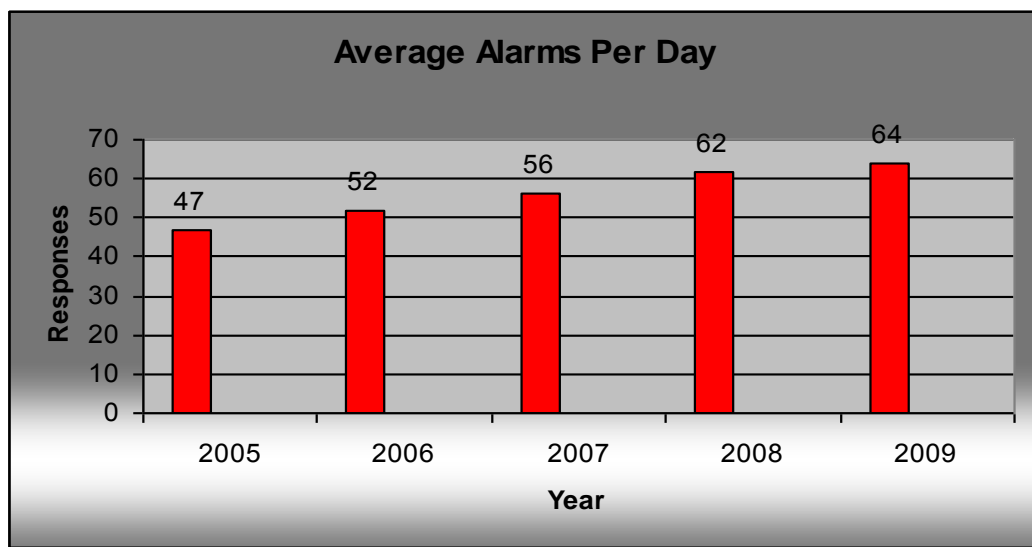




Chart D.12

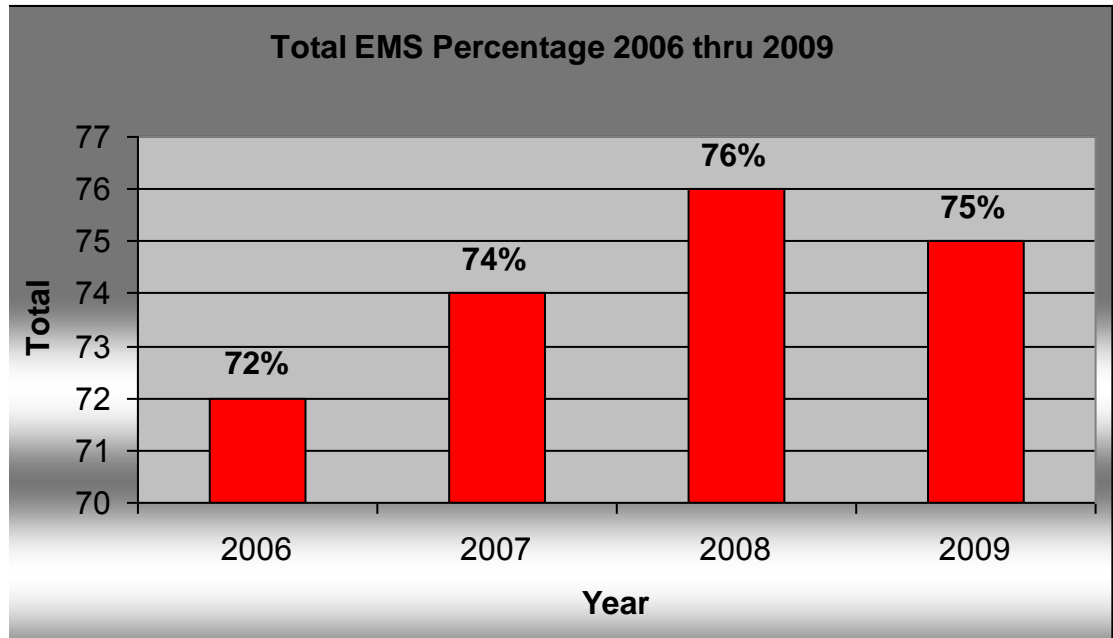
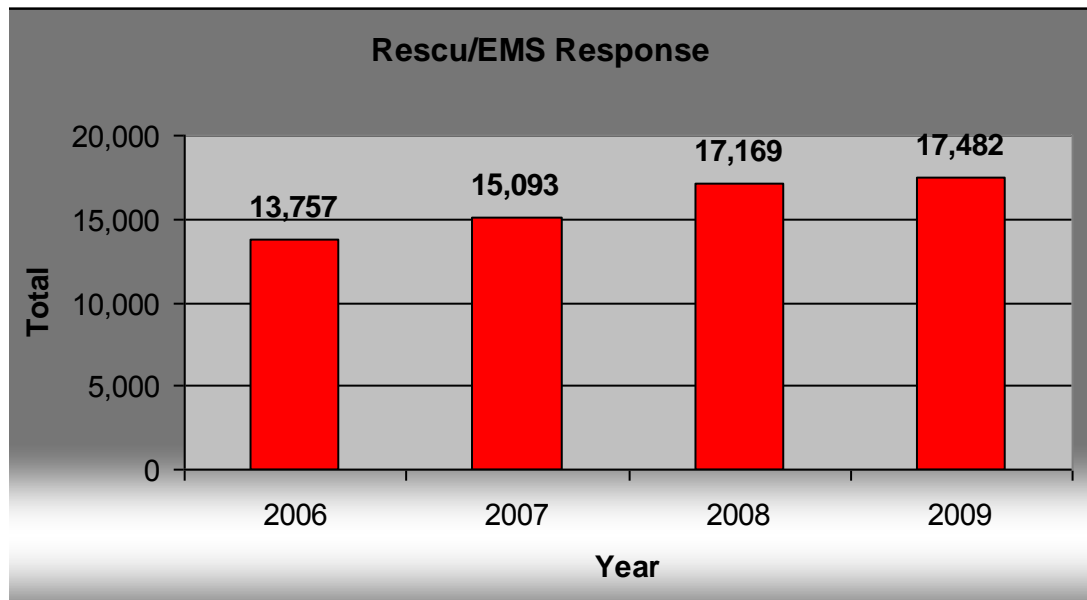


Chart D.13





Consequence Factors

The methodology that was utilized to consider the physical features of potential risks within the response areas presented similarities with that of those when considering fire suppression services. When identifying these consequence factors, you have to give consideration to the impacts on the community and other loss issues as well. During the Risk Analysis Hazard Classification process, the businesses that were surveyed included occupancy capacity. Structures such as shopping centers, schools, and other high capacity locations are found all throughout the City of Fayetteville. The use of the fire response zones and geo-proximity mapping has allowed us to identify these specific locations.

The typical impact that an EMS call has on the community is minimal at most. The patient and direct family members are the ones most severely impacted. However, when these incidents occur in areas such as schools and shopping centers, the incident itself can cause disruption to the everyday flow of these places. The most significant points in which an EMS call would have a significant impact are when there are multiple patients involved. These types of incidents impact the department's ability to effectively manage resources throughout. The use of multiple companies could result in leaving other areas vulnerable and response coverage's then experience a lag.

Classification Methodology

During the process of identifying and classifying the EMS risk within the service area, the department utilized a combination of both statistical and geographical data to assist in the planning processes for the organization. With this information collected, the department assessed potential risks within the community, identified areas with increased demands for service, and developed organizational goals. Due to limits in current departmental capabilities, the identification of the level of risks associated with particular types of EMS calls was not performed.



However, because of enhancements in our communication center and the CAD system, we were able to identify the most likely risks that the department could encounter. Based on the level of the call that is determined through the priority dispatching and the identification of the critical tasks associated with EMS response, the department was able to determine appropriate resource allocations for specific calls. The critical tasks that were developed can be found in the Critical Task Section for EMS response.

Emergency Medical related response account for roughly seventy five percent (75%) of the calls responded to annually. With this, the department also utilized statistical data pertaining to the EMS calls. Doing so allowed the department to identify the areas within the City where the demand for service is greatest. Factors such as time of day, volume per station district, and overall distribution of calls assisted the department in gathering a true understanding of the level of risks that we can expect throughout the City of Fayetteville. The previous section provided much of the data that has been collected that assisted personnel in completing this task.

Critical Resource Analysis

The Critical Resource Analysis determines what resources are needed to accomplish the applicable tasks at the scene of an emergency incident. The City of Fayetteville Fire Emergency Management Department examined its current deployment levels to structure fires, rescues, haz-mat, and emergency medical responses. To initiate patient care, there are many critical tasks that need to be performed throughout the different phases of the incident.

When assigning personnel to complete critical tasks, firefighter safety is the highest priority. Exercising scene safety and utilize body substance isolation techniques are key points to ensuring the safety of both the patient and that of FFD personnel. The second consideration is assigning an adequate number of personnel and additional resources so that these critical tasks can be completed safely.



Depending on the incident the number of resources and personnel can vary. A single patient with a minor injury or illness is typically handled with two personnel, however an incident such as a full arrest will require additional personnel to complete all required tasks. To minimize the loss of life and potential injury to the patient or patients, there must be an adequate supply of physical resources to accomplish certain critical tasks as they pertain to EMS calls.

Physical resources are considered anything that is utilized in the mitigation of an incident and are available within the appropriate level of risk, response area, or planning zone. These resources as they relate to those required for EMS incidents consist of apparatus/equipment, personnel, and communications/dispatch. Without these essential resources, the ability to effectively mitigate an incident would lag and the ability to deliver adequate services to the ever increasing volume of calls would begin to fall. Currently the Fayetteville Fire/Emergency Department is able to maintain these resources. With sixteen fire stations spread throughout the City limits, there is a vast array of front line apparatus that are available to respond to any location in the City in a reasonable manner of time. The current front line units consist of 16 Engine Company's, 5 Truck Company's, and 6 Squad Units (2 of these are Heavy Rescue Capable) that are available to respond and deliver services for EMS calls.

The primary unit for EMS calls is predominately the Squad units. They are stationed at Station 1, 5, 7, 8, 14, and 17. The stations that do not have a squad unit rely on the assigned engine as the primary unit for responding to EMS calls within their respective districts. The personnel count is divided into three separate shifts where each has total shift strength of 103 personnel. The total number of personnel for the department is 330. Some personnel are assigned to various administrative positions. As mentioned in the Fire Suppression section of this document, the FFD does not have any actual ability to control the communications center. Despite this, communications is a vital portion of our response capabilities. Because of this reason, certain members of the department assist









by providing guidance and valuable insight on ways to improve things such as dispatching and call processing.





It is important to note that included in our department's ISO rating is an assessment of the City of Fayetteville's communications center. The center received excellent marks during the assessment and is capable of meeting the needed resources. It is through the use of these resources that the department is able to effectively provide emergency medical service capabilities throughout the City of Fayetteville. With the increase in EMS calls growing each year, the department must continue to adjust and include resources into its overall operation. Doing this allows us to continue to meet demands that are encountered on a daily basis.

Medical Call Critical Tasks

Medical emergencies are very time sensitive and require specialized tasks from both the fire department and the ALS units that we assist. In 2008, the department answered alarms within 5 minutes, sixty seven percent of the time. This time starts upon dispatch and goes until arrival to the patient. Medical calls account for roughly seventy five percent of the call volume for the department. They include but are not limited to patients who are sick, have respiratory problems, traumatic injuries, chest pains, and cardiac arrest. It is the responsibility of the ranking personnel to first assess the situation and ensure scene safety. Established operating procedures then determine the level and nature of care that is given to the person or persons involved with the emergency. The care given will vary on each call; however their overall responsibilities for patient care can be generalized into the following categories.

-  Patient Assessment and Vital Signs
-  Oxygen Therapy and Respiratory Emergency Care
-  Spinal Immobilization and Splinting Care
-  CPR and Cardiac Emergency Care
-  Wound Care
-  General Pharmacology



-  Obstetrics and Gynecology Care
-  Weather related exposure Care
-  Poisonings and Allergic Reaction Care
-  Behavioral Emergency Care

The department serves as a primary first responder organization and provides assistance to Cumberland County Emergency Medical Services. Every member of the department is certified at the basic level of emergency care and receives the required annual continuing education as dictated by the North Carolina Office of Emergency Medical Services (NCOEMS).

With medical calls being the majority of the emergencies responded to, the department conducted an analysis on the field and determined the necessary critical task and personnel to handle a scene safely. Mirroring the fire hazard analysis, the medical calls are divided into three categories with each one requiring additional personnel and resources. Listed in the following charts is a breakdown of each level of medical call. The number of patients and severity of the call determines what level of response is given for the call.

Medical Call Level I Analysis

(Single Patient Care, Breathing Verified)

(Incident Commander serves dual role under these situations)

This level of response consists of one Engine Company or Service/Rescue unit.

CRITICAL TASK	PERSONNEL	COMPANY
I/C & Documentation	1	Service Rescue
Patient Care	1	Service Rescue
Total	2	Range 2 to 3 Personnel



Medical Call Level II Analysis

(Minor Vehicle Crash, Full Arrest, Patient Not Breathing Multiple Patient Care)

This level of response consists of one Engine company and one Service/Rescue unit.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine
Documentation	1	1st Engine
Patient Care	3	1st Engine & S/R
Total	5	Range 5 to 6 Personnel

Medical Call Level III Analysis

(Multiple Patient Care)

This level of response consists of two Engine companies and one Service/Rescue unit.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine Officer
Documentation	1	1st Engine
Safety	1	2nd Engine Officer
Patient Care	5	1st/2nd Engine & S/R
Total	8	Range 8 to 10 Personnel



Hazardous Materials Services

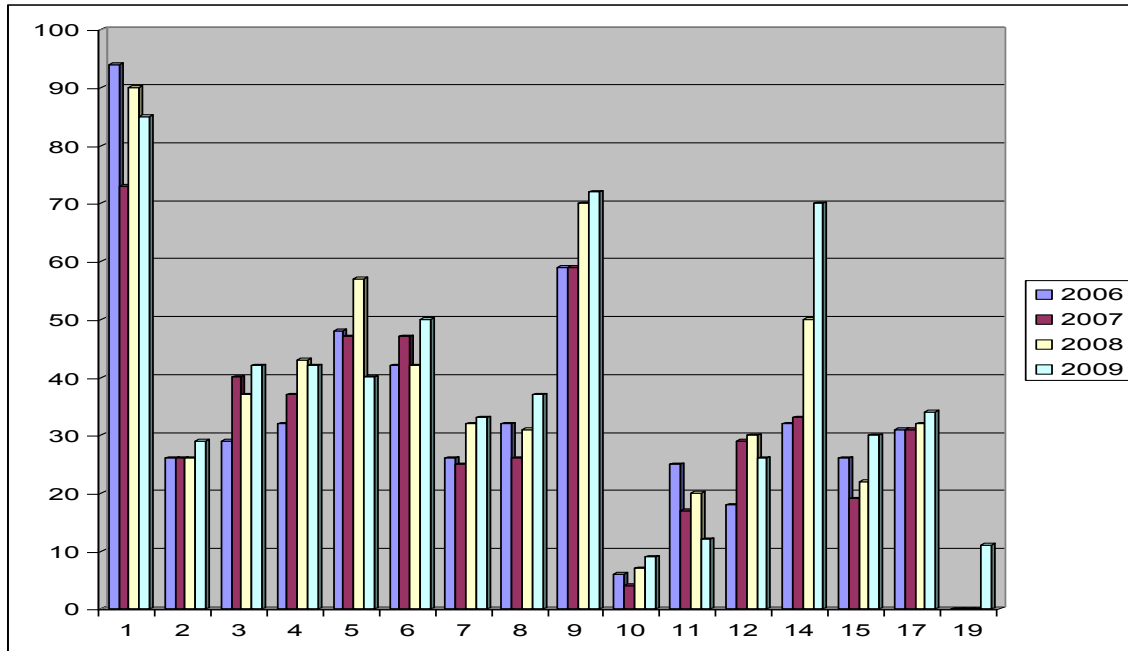
Probability Factors

Historically, the Fayetteville Fire/Emergency Management Department has based its hazardous materials technician level team responses out of one designated location in the City. The use of Engine Company responses has been utilized to evaluate the call for service and provide additional information. With this information, the department then determines whether to continue, cancel, or send additional resources. However, as the City of Fayetteville has seemingly doubled in size and population over the last twenty years, the probability that an actual Hazardous Materials incident will occur has grown as well.

With the number of hazardous material incidents increasing each year, the department's ability to provide equal and adequate services across the board is becoming increasingly more difficult. Chart **D.14** shows the historical review of hazardous material incidents for each station over the last four years. With this information, it is clear that having our resources operating out of one location isn't as effective as it could be. Station 9, which is located off of Santa Fe Drive, is the second busiest district for hazardous material responses. Naturally, providing coverage on the opposite side of the City would improve our ability to effectively place all applicable equipment on scene within specified times. It is important to note however, that this distribution of calls included all types of hazardous materials responses. These responses can range from minor fuel spills to that of significant releases of hazardous materials that require evacuations.



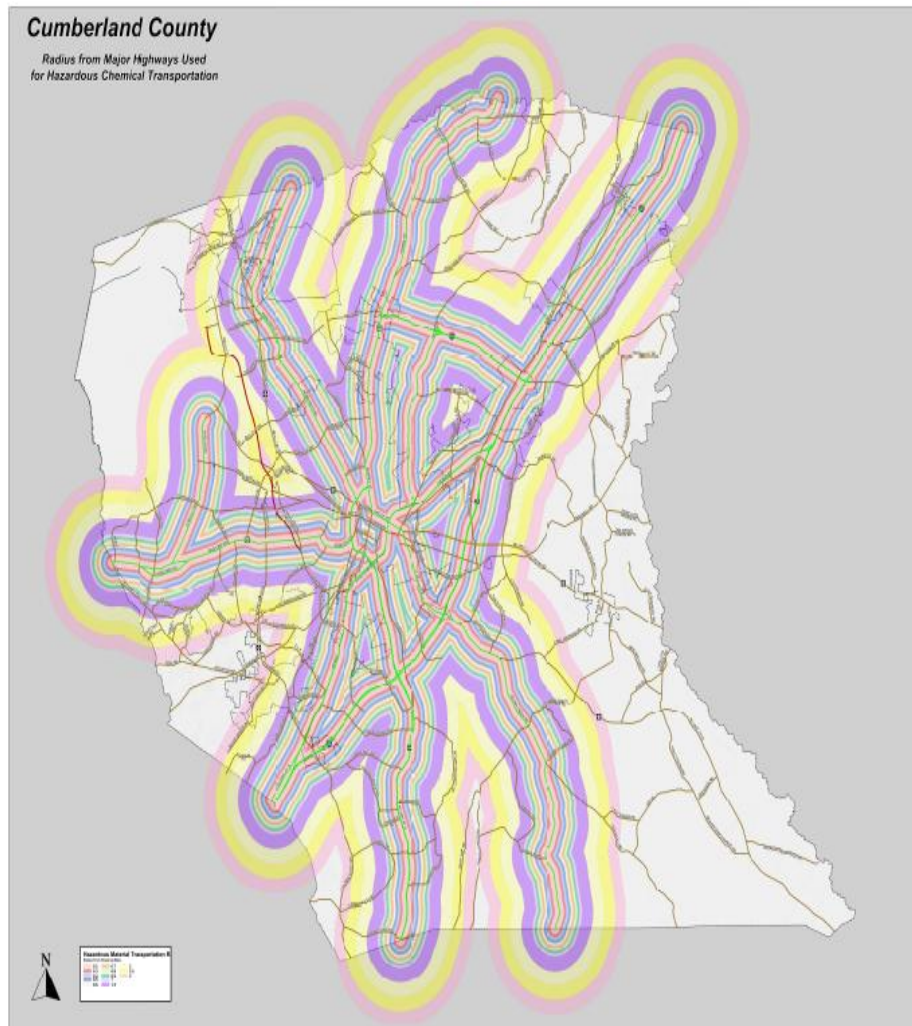
Chart D.14



When determining the probability of a hazardous materials incident, you have to account for not only the materials that are located within the City of Fayetteville, but you also must consider those materials that travel through the City on a daily basis. The major thoroughfares such as Interstate 95 and the railway system account for the majority of transported materials each day. The following maps indicate these thoroughfares and the probability of impact area in tenths of a mile up to three miles. Also included is the same impact format are the facilities that are considered chemical facilities within the City of Fayetteville and nearby surrounding areas. While the department has not experienced a major incident as a result of these materials passing through, this should be considered a high threat to the City of Fayetteville and its residents. The probability that an incident dealing with hazardous materials and requiring all of the available resources is ever present and determining the fallout and affected areas of such an incident is something we must be prepared for at all times.



Map D.15
Cumberland County Major Highway used for Hazardous Chemical
Transport



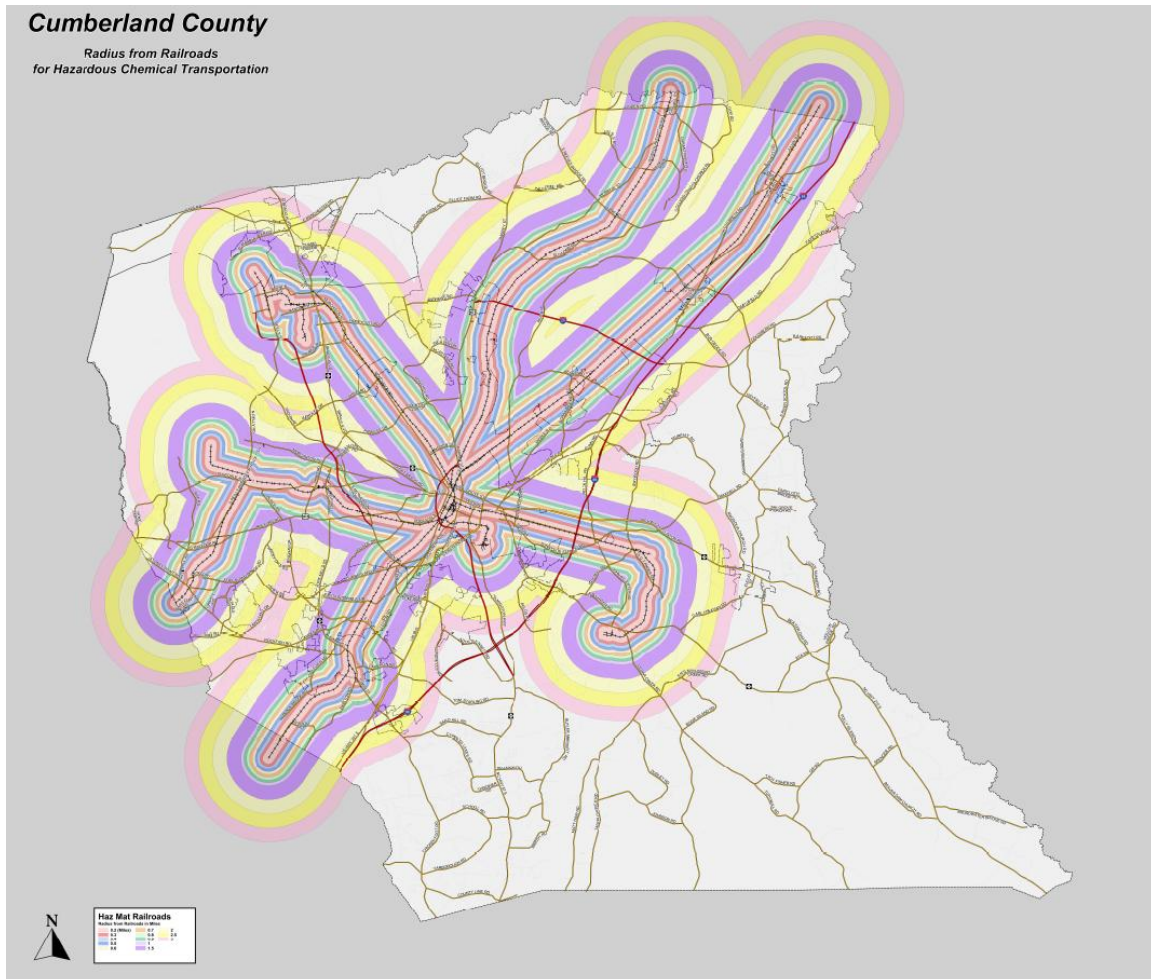
Hazardous Material Transportation

Radius From Route by Miles

0.2	0.7	2
0.3	0.8	2.5
0.4	0.9	3
0.5	1	
0.6	1.5	



Map D.16
Cumberland County Major Highway used for Hazardous Chemical
Transport



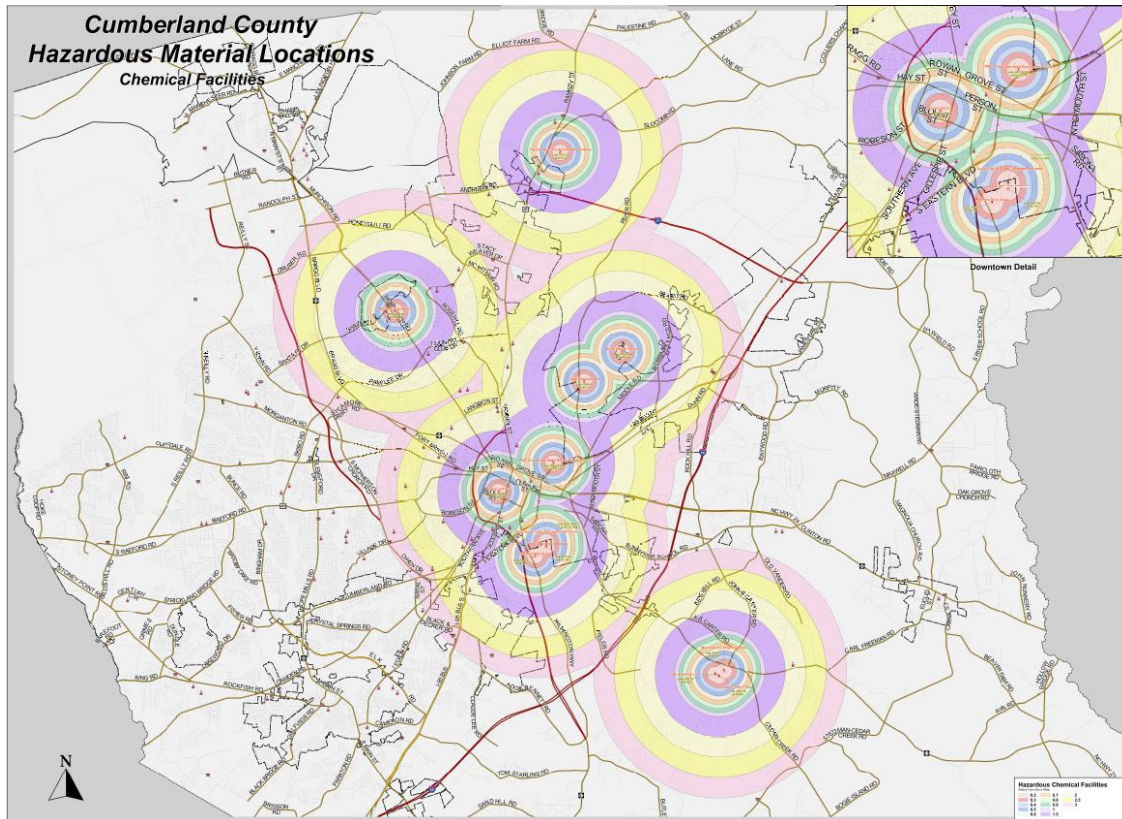
Hazardous Material Transportation

Radius From Route by Miles

0.2	0.7	2
0.3	0.8	2.5
0.4	0.9	3
0.5	1	
0.6	1.5	



Map D.17
Cumberland County Hazardous Materials Location
Chemical Facilities



Facility Name	Street Address
Dak Americas LLC	3216 Cedar Creek Road
DuPont Teijin Films	3220 Cedar Creek Road
Monsanto Co. Crop Protection	Hwy 53E & 210S, Cedar Creek Rd
Univar USA Inc	420 Worth Street
Hexion Specialty Chemicals	1411 Industrial Drive
Piedmont Natural Gas	1069 Wilkes Rd
Cargill Incorporated	1754 River Road
Motiva Enterprises LLC	992 Shaw Mill Road
The Goodyear Tire And Rubber Company	6650 Ramsey Street
Butler Warner G Plant	1723 State Road-Custer Avenue
Carolina By-Products - Fayetteville Division	1309 Industrial Drive
PWC Cross Creek Water Reclamation Facility	601 N. Eastern Blvd.



Consequence Factors

The department understands the importance of providing the quickest and most efficient services as soon as possible. However, when dealing with hazardous materials, it is understood that the actual progression of scene mitigation often works in contrast to that of fire suppression and emergency medical services. These types of incidents typically operate in a slower and more calculated manner. Because of this, the initiation of a full assignment of Hazardous Materials resources within a specific amount of time has not been of great concern until recently. It is because of the process of becoming an accredited agency, the department has realized that even though hazardous materials incidents often require significant operational times, providing the resources required in a timely fashion is even more important. Providing the timely responses reduces the overall operations of the incident. The amount of time it takes units to arrive is equally as important as the time it takes to restore order to the location.

With this in mind, there are several consequence factors that are accompanied with Hazardous Materials Responses. The level of the call has a direct bearing on the potential consequences associated with the call. These types of calls affect a broad spectrum of areas. They can affect the population, businesses, transportation corridors, and even our natural resources. The majority of our responses that we respond to each are fuel spills and leaks. These types of calls have minor consequences associated and typically extend to fewer than five people. The extent of the incident is localized and only affects those directly involved. The materials can easily be contained and stability is restored. However, incidents such as natural gas line ruptures or incidents that involve a large amount of hazardous materials affect a much larger area. Having to evacuate an area due to a vapor cloud or having a major fuel spill in the Cape Fear River can cause significant consequences. The loss in revenues during these incidents, the loss of wildlife and water contamination, along with the loss of available tourist and recreational areas are possible areas that can be affected during these incidents. When compared to that of Fire Suppression and EMS responses, these types of calls do not happen that often.



They only account for approximately 2.58% of the incidents we respond to on an annual basis. However, the potential risk factors and consequences are much more wide spread. The occurrence of such an incident can produce effects that can and will likely be felt throughout the affected community for periods of time that far exceeds the operation of the incident.

Classification Methodology

The methodology used to determine the associated risks that pertain to Hazardous Materials was done so in a similar fashion as that of Emergency Medical Services. Through the use of priority dispatching, the risk levels were identified. Accompanied with the associated response criterion that was entered into the CAD system, the department is able to provide the adequate resources to the specific call. The call volume associated with Hazardous Materials only accounts for 2.5% of the calls that we respond to on an annual basis. With this in mind, out of the roughly 580 calls that we respond to, at least half are handled with a single engine response. Because of these limited number of responses, the use of the levels or risk as they pertain to priority dispatching is meeting the needs of the department.

Critical Resource Analysis

The Critical Resource Analysis determines what resources are needed to accomplish the applicable tasks at the scene of an emergency incident. When looking at the resources of the Fayetteville Fire/Emergency Management Department, you have to look at both the operational and technical resources of the department. The City of Fayetteville Fire Emergency Management Department has examined its current deployment capabilities for hazardous materials responses. Involved in the mitigation of the call, there are many critical tasks that need to be performed throughout. When assigning personnel to complete these tasks, firefighter safety is the highest priority. The second consideration is assigning an adequate number of personnel and additional resources so that these critical tasks can be completed safely.



Depending on the incident the number of resources and personnel can vary. A minor fuel spill is typically handled with one Engine Company, however an incident such as a fuel tanker truck will require additional personnel and units to complete all required tasks.

Physical resources are considered anything that is utilized in the mitigation of an incident and are available within the appropriate level of risk, response area, or planning zone. These resources as they relate to those required for hazardous material incidents consist of apparatus /equipment, personnel, and communications/dispatch. Without these essential resources, the ability to effectively mitigate an incident would lag and the ability to deliver adequate services to the ever increasing volume of calls would begin to fall. Currently the Fayetteville Fire/Emergency Department is able to maintain these resources for both the operational and technical levels. As it pertains to the operational side of hazardous materials, the department has resources available at all stations throughout the City. All personnel with the Fayetteville Fire/Emergency Management Department are trained at a minimum of Hazardous Materials Operations level. They are utilized to provide initial assessment of the scenes and are able to handle incidents such as small fuel spills.








Equipment such as Hazardous Material pools and absorbent materials are carried on the units. This is used on incidents where the initial responding units can control the scene. In the event that they find an incident, which is beyond their capabilities to control, the request for the designated Hazardous Materials Units are requested and dispatched. There are two primary Hazardous Materials Units that are currently located at Station One on Person Street. Haz-Mat One and Haz-Mat Two (RRT-3) are available to provide response throughout the City of Fayetteville. Haz-Mat Two is used primarily as a backup to the first unit. Its primary purpose is to be available for the NC Regional Response Teams that respond throughout the state. In addition to the main units there are also several other trailers that carry additional supplies such as decontamination equipment, additional specialty tools, and other things that can be used during a hazardous materials



response. The personnel that operate this equipment are certified as Hazardous Materials Technicians and make up the FFD Hazardous Materials Team.

Hazardous Materials Critical Tasks

The Fayetteville Fire/Emergency Management Department operates a hazardous materials response team at the North Carolina Hazardous Materials Technician level. All members of the fire department are certified at the Operations level. The haz-mat team responds to an array of different incidents that range from gas leaks, fuel spills, overturned fuel trucks, suspicious substances, and more. With the assistance of other units throughout the city, the proper mitigation and control of a hazardous materials incident is conducted. The first arriving unit officer shall establish command and report the observable conditions. The Incident Commander will then make the decision as to the need for additional HazMat support. During the teams operation, there are numerous skills that are utilized. Depending on the nature of the call, dictates the response from the team. Some of the responsibilities that are carried out by the team are listed as follows

-  - Controlled Product Release
-  - Air Monitoring
-  - Spill Containment
-  - Research
-  - Decontamination
-  - Product Identification
-  - Rescue

Fayetteville is also the location of one of the Hazardous Materials Regional Response Teams. The team is one of seven that are strategically located throughout the state. The team is available to supplement local resources when an incident is beyond the first responders' capabilities. Such incidents generally require more sophisticated equipment and hazardous materials technicians who have received a higher level of training. Once on scene, the Regional Response Team works within the existing command structure. The team leader is the primary point of contact with the team. The team provides assistance with mitigating the incident to a point where it has stabilized, and the emergency phase has been terminated.



Being a part of the Regional Response team requires a wide range of equipment, skills, and resources in addition to the demands for that of the City of Fayetteville. Based on this, the department conducted an analysis for Hazardous Materials response and outlined the critical task needed along with the personnel required to accomplish them. The following charts outline these needs on the three levels of incidents.

Hazardous Materials Level I Analysis

(Actions taken include the first arriving Engine Company)

This level of response consists of one Engine company.

CRITICAL TASK	PERSONNEL	COMPANY
I/C - Make Proper Notifications	1	1st Engine Officer
Technical Group	2	1st Engine
Total	3	Range 3 to 4 Personnel

Hazardous Materials Level II Analysis

(Actions taken include the first arriving Engine Company)

(Level "B" Entry)

This level of response consists of one Engine company, one Hazardous Materials Response unit, and one Battalion Commander.

CRITICAL TASK	PERSONNEL	COMPANY
I/C Make Proper Notifications	1	1st Engine Officer
Battalion Commander	1	B/C Vehicle
Documentation/Research	1	Haz-Mat Team
Entry Group I	2	Haz-Mat Team
Entry Group II	2	Haz-Mat Team
Decontamination Group	2	1st Engine
Total	9	Range 9 to 11 Personnel



Hazardous Materials Level III Analysis

(Actions taken include the first arriving Engine Company)

(Level "A" Entry)

This level of response consists of one Engine company, two Hazardous Materials units, and one Battalion Commander.

CRITICAL TASK	PERSONNEL	COMPANY
C - Make Proper Notifications	1	1st Engine Officer
Safety	1	Haz-Mat Team
Battalion Commander	1	B/C Vehicle
Documentation/Research	1	Haz-Mat Team
Medical Group	2	1st Engine
Entry Group I	2	Haz-Mat Team
Entry Group II	2	Haz-Mat Team
Entry Group III	2	Haz-Mat Team
Decon Group	3	Haz-Mat Team
Total	15	Range 15 to 16 Personnel



Rescue Services

Probability Factors

The probability factor of rescue responses within the City of Fayetteville is one that is currently extremely difficult to determine. Prior to the development of this Standard of Cover, rescue responses that required any form of extrication, or removal of a patient from harm was included in the overall accumulation of EMS responses. In order to change this process, additional fields within our records management system will need to be adjusted to reflect these types of calls. Personnel will also have to be trained on the proper way of identifying these calls through documentation.

However, when discussing probability of rescues services within the City of Fayetteville, one has to assume that there is a seemingly high probability that these types of calls will take place on a regular basis. By taking into account that the City of Fayetteville is one of the largest Cities in the state and that EMS related calls, which account for roughly 75% of our annual call volume, it can be assumed that a significant portion of rescue related calls for service are associated with them. Our records indicate that for the 2009 fiscal year, the department responded to approximately 260 rescue incidents. These included calls such as extrications from vehicles and buildings, children locked in vehicles, water rescues, and elevator rescues. However, because of current reporting designs, it is believed that these statistics don't completely reflect the number of annual rescue calls. Upon the implementation of changes to recording information, we will be able to determine a more accurate figure that will assist the department in determining the probability for rescue services.



Consequence Factors

In the development of the consequence factors associated with Rescue Services, it was found that there are similarities to that of Emergency Medical Services. When identifying these factors, the department utilized the limited information that was available regarding rescue related calls. By conducting an analysis of the types and locations of incidents, the department was able to determine the effects that calls of this nature have on varying area of importance. In doing so, we found that the majority of the incidents accounted for localized effects. Those individuals primarily involved in the incident were typically the most affected. Due to the incident and injuries sustained, lost wages, time from work, and personal stresses were the primary effects found. The most significant area outside of those directly involved dealt with the traffic congestion on the main thoroughfares. During incidents where an extrication operation was initiated, the resources needed, personnel on scene, and the overall size of the incident caused the flow of traffic to slow or stop. Depending on the size of the incident, thoroughfare could be shut down for extended times or at a minimum condensed to one lane.

Because of these types of incidents, the overall progress of the economy and flow of business can be delayed. However, these delays don't pose a significant impact to the community as they are typically resolved in a relative short amount of time. Other incidents that involve large scale operation such as a building collapse could have extensive impacts on the community. Factors such as the location of the incident, number of people involved, and loss of revenues can have a lasting impact on the community that can be felt for years.

Classification Methodology

The methodology used to determine the associated risks that pertain to Rescue was accomplished just as they were identified with the Hazardous Materials and Emergency Medical Services risks. Through the use of priority dispatching, the risk levels were identified. Accompanied with the associated response criterion that was



entered into the CAD system, the department is able to provide the adequate resources to the specific call. At this time, the department is not able to determine the actual call volume associated with Rescue related calls. Prior to the development of this document all statistical data associated with rescue was classified as an EMS related call.

Critical Resource Analysis

The City of Fayetteville Fire Emergency Management Department has examined its current deployment capabilities for rescue responses. Involved in the mitigation of these calls are many critical tasks that need to be performed throughout. When assigning personnel to complete these tasks, firefighter safety is the highest priority. The second consideration is assigning an adequate number of personnel and additional resources so that these critical tasks can be completed safely. Depending on the incident the number or resources and personnel can vary. A child locked in a vehicle is typically handled with one Engine Company, however an incident such as a vehicle pin-in incident will require additional personnel and units to complete all required tasks.

Physical resources are considered anything that is utilized in the mitigation of an incident and are available within the appropriate level of risk, response area, or planning zone. These resources as they relate to those required for rescue operations consist of apparatus /equipment, personnel, and communications/dispatch. Without these essential resources, the ability to effectively mitigate an incident would lag and the ability to deliver adequate services to the ever increasing volume of calls would begin to fall.

The number one rescue operation that the department responds to each year is calls involving children being locked in a vehicle. Each of the sixteen stations throughout the City has a unit that is equipped with a lock-out kit for the specific purpose of gaining access to a vehicle. In addition to this, the FFD also has several apparatus strategically placed throughout that are equipped an array of extrication equipment, ropes, and other specialty tools that are used during rescue operations. The design



placement of the units, equipment, and personnel are done so as to be able to effectively provide adequate response times and provide the department to be able to meet the Critical Tasks that are defined in the following section.

Rescue Critical Tasks

The Fayetteville Fire/Emergency Management Department is equipped to handle numerous levels of rescue situations. The department has two Rescue units equipped and classified for Heavy Rescue operations throughout the city. The department has two trailers, one equipped specifically for Trench Rescue Operations and the other for Confined Space.

The two units respond as support for the first arriving units on an incident. Based on the severity of the call, the response can include a single engine company response for level I incidents and up to two Rescue units with five personnel per unit for a level III incident. The department also has three additional units that are considered Service Rescue units and are equipped to handle smaller operations such as vehicle entrapments and extrications. All apparatus are positioned strategically throughout the city to provide an adequate level of response. It is the duty of the first arriving officer to establish command and report the observable conditions. The officer shall also determine what, if any additional resources are needed and provide assignments to those personnel.

In addition to the rescue responses that the department handles within the city, Fayetteville is also a member of the Collapse Search and Rescue team that coordinates throughout the state and provides services in the event of an emergency. The department has conducted an analysis to determine the levels of rescue incidents that may be encountered. Identified are the Critical tasks to be accomplished and the minimum number of personnel needed to do so. The charts listed below outline these task and personnel.



Rescue Level I Analysis

(Child Locked in a Vehicle, Single Engine Response)

This level of response consists of one Engine company.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine
Technical Group	2	1st Engine
Total	3	Range 3 to 4 Personnel

Rescue Level II Analysis

(Roll Over, Pin-in, and Entrapments)

This level of response consists of one Engine company, one Heavy Rescue unit, one Squad Unit and one Battalion Commander.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine Officer
Safety	1	Battalion Commander
Technical Group I	3	Rescue Unit
Technical Group II	2	Rescue Unit
Patient Group	2	1st Engine
Fire Suppression Group	2	S/R Unit
Total	11	Range 11 to 12 Personnel



Rescue Level III Analysis

(Confined Space, Trench Rescue, Structural Collapse)

This level of response consists of one Engine company, one Aerial apparatus, two Heavy Rescue units, and one Battalion Commander.

CRITICAL TASK	PERSONNEL	COMPANY
Incident Command	1	1st Engine Officer
Safety	1	Battalion Commander
Accountability	1	1st Truck
Documentation/Research	1	1st Engine
Patient Group	3	1st Engine / 1st Truck
Technical Group I	4	1st Rescue Unit
Technical Group II	4	2nd Rescue Unit
Support Group	2	1st/2nd Rescue Unit
Total	17	Range 17 to 19 Personnel

**Component E: Historical Perspective and System Performance****Introduction:**

The Fayetteville Fire/Emergency Department completed a comprehensive review of historical emergency response performance as well as a measurement of the current system performance. In our measurement of system performance factors such as the distribution, concentration, and the reliability of our resources availability were closely measured.

The scope of the performance measurement included data from 2006, 2007, 2008, 2009 and 2010 and documents response types, incident counts, turn-out time, travel time, total response time from alarm time, mutual aid responses and incidents by district. Additionally, calls for service were analyzed by month of year, day of week, and hour of the emergency response. This type of analysis examines data to determine trends in calls for service.

Five years of call data were analyzed for this process. The years 2006 through 2009 were included in the process however do not include call processing time. Call processing time was not documented until the year 2010 with the introduction of the new CAD system.

**Calls for Service
2006 through 2010**

NFIRS Incident Description	Incident Count
False Alarm & False Call	8,024
Fire	5,864
Good Intent Call	7,006
Hazardous Condition (No Fire)	2,820
Overpressure Rupture, Explosion, Overheat(no fire)	111
Rescue & Emergency Medical Service Incident	82,098
Service Call	4,071
Severe Weather & Natural Disaster	141
Special Incident Type	99
Total Incident Responses	110,234



Incident Responses by Incident Type

NFIRS Incident Description	2006	2007	2008	2009	2010
False Alarm & False Call	1,473	1,424	1,590	1,617	1,920
Fire	1,172	1,385	1,092	1,018	1,197
Good Intent Call	1,268	1,264	1,328	1,483	1,663
Hazardous Condition (No Fire)	515	510	580	582	633
Overpressure Rupture, Explosion, Overheat(no fire)	31	25	23	16	16
Rescue & Emergency Medical Service Incident	13,757	15,093	17,169	17,482	18,597
Service Call	603	641	748	967	1,112
Severe Weather & Natural Disaster	41	9	56	23	12
Special Incident Type	24	30	22	9	14
Total Incident Counts	18,884	20,381	22,608	23,197	25,164
Total Incident Counts For 2006 thru 2010	110,234				

**All Incident Type Response Performance: Primary Unit**

All Incident Types		Incident Count % <= Baseline	2006
			Minutes
Turn-Out Time		89.78%	1.52
Travel Time		85.13%	5.78
Total Response Time		90.41%	7.3
			2007
			Minutes
Turn-Out Time		90.37%	1.48
Travel Time		83.38%	5.98
Total Response Time		88.47%	7.46
			2008
			Minutes
Turn-Out Time		88.93%	1.57
Travel Time		81.72%	6.15
Total Response Time		85.49%	7.72
			2009
			Minutes
Turn-Out Time		89.72%	1.53
Travel Time		81.20%	6.1
Total Response Time		86.50%	7.63
			2010
**Includes Call Processing Time			Minutes
Call Processing Time		48.28%	3.8
Turn-Out Time		92.11%	1.42
Travel Time		78.85%	6.28
Total Response Time		70.43%	11.5

**Medical Incident Response Performance: Primary Unit**

EMS Incident Types	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	92.92%	1.35
Travel Time	89.50%	5.25
Total Response Time	100.00%	6.6
		2007
		Minutes
Turn-Out Time	93.08%	1.35
Travel Time	87.98%	5.42
Total Response Time	97.49%	6.77
		2008
		Minutes
Turn-Out Time	92.04%	1.40
Travel Time	86.44%	5.57
Total Response Time	94.69%	6.97
		2009
		Minutes
Turn-Out Time	93.24%	1.35
Travel Time	85.06%	5.68
Total Response Time	93.88%	7.03
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	50.29%	4.00
Turn-Out Time	94.70%	1.30
Travel Time	82.04%	5.95
Total Response Time	72.00%	11.25



Fire Incident Response Performance: Primary Unit

Fire Incident Types	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	79.58%	2.00
Travel Time	70.50%	7.77
Total Response Time	67.55%	9.77
		2007
		Minutes
Turn-Out Time	80.80%	1.93
Travel Time	66.79%	8.18
Total Response Time	65.28%	10.11
		2008
		Minutes
Turn-Out Time	77.40%	2.05
Travel Time	62.01%	8.75
Total Response Time	61.11%	10.80
		2009
		Minutes
Turn-Out Time	76.19%	2.00
Travel Time	65.65%	7.83
Total Response Time	67.14%	9.83
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	50.79%	2.73
Turn-Out Time	81.96%	1.85
Travel Time	64.64%	8.12
Total Response Time	63.78%	12.70

**HazMat Incident Type Response Performance: Primary Unit**

HazMat Incident Types	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	81.68%	2.07
Travel Time	76.81%	7.14
Total Response Time	71.66%	9.21
		2007
		Minutes
Turn-Out Time	83.17%	2
Travel Time	76.55%	7.48
Total Response Time	69.62%	9.48
		2008
		Minutes
Turn-Out Time	78.88%	2.22
Travel Time	71.98%	7.54
Total Response Time	67.62%	9.76
		2009
		Minutes
Turn-Out Time	78.07%	2.03
Travel Time	69.94%	7.32
Total Response Time	70.59%	9.35
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	41.76%	3.37
Turn-Out Time	83.24%	1.78
Travel Time	66.51%	7.8
Total Response Time	62.55%	12.95

**Rescue Incident Type Response Performance: Primary Unit**

Rescue Incident Types	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	80.95%	2.15
Travel Time	77.78%	7.63
Total Response Time	67.48%	9.78
		2007
		Minutes
Turn-Out Time	80.39%	2.62
Travel Time	68.63%	14.95
Total Response Time	37.56%	17.57
		2008
		Minutes
Turn-Out Time	85.71%	1.77
Travel Time	78.57%	6.58
Total Response Time	79.04%	8.35
		2009
		Minutes
Turn-Out Time	78.46%	2.42
Travel Time	63.08%	11.12
Total Response Time	48.74%	13.54
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	55.46%	2.82
Turn-Out Time	89.92%	1.53
Travel Time	71.43%	9.4
Total Response Time	58.91%	13.75



First Chief Officer Response Performance: Primary Unit

First Chief All	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	51.40%	2.77
Travel Time	61.33%	10.1
Total Response Time	51.28%	12.87
		2007
		Minutes
Turn-Out Time	2.85%	2.85
Travel Time	10.77%	10.77
Total Response Time	48.46%	13.62
		2008
		Minutes
Turn-Out Time	40.54%	2.96
Travel Time	55.51%	10.78
Total Response Time	48.03%	13.74
		2009
		Minutes
Turn-Out Time	39.31%	3.18
Travel Time	59.37%	9.53
Total Response Time	51.93%	12.71
		2010
**Includes Call Processing Time		Minutes
Call Processing Time	50.72%	2.99
Turn-Out Time	61.81%	2.48
Travel Time	57.83%	11.23
Total Response Time	48.50%	16.7



First Engine Co. Response Performance: Primary Unit

First Engine All	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	92.57%	1.38
Travel Time	87.80%	5.42
Total Response Time	97.06%	6.8
		2007
		Minutes
Turn-Out Time	92.93%	1.37
Travel Time	85.93%	5.67
Total Response Time	93.75%	7.04
		2008
		Minutes
Turn-Out Time	91.54%	1.43
Travel Time	84.01%	5.82
Total Response Time	91.03%	7.25
		2009
		Minutes
Turn-Out Time	92.49%	1.39
Travel Time	83.03%	5.83
Total Response Time	91.41%	7.22
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	47.61%	3.78
Turn-Out Time	93.83%	1.33
Travel Time	81.11%	6.03
Total Response Time	72.71%	11.14

**First Truck Co. Response Performance: Primary Unit**

First Truck All	Incident Count % <= Baseline	2006
		Minutes
Turn-Out Time	87.06%	1.64
Travel Time	81.39%	6.21
Total Response Time	84.08%	7.85
		2007
		Minutes
Turn-Out Time	88.43%	1.55
Travel Time	79.39%	6.38
Total Response Time	83.23%	7.93
		2008
		Minutes
Turn-Out Time	85.73%	1.7
Travel Time	76.91%	6.52
Total Response Time	80.29%	8.22
		2009
		Minutes
Turn-Out Time	85.12%	1.72
Travel Time	73.23%	6.62
Total Response Time	79.14%	8.34
		2010
		Minutes
**Includes Call Processing Time		
Call Processing Time	47.26%	3.45
Turn-Out Time	89.34%	1.52
Travel Time	69.64%	6.93
Total Response Time	68.07%	11.9



First Rescue Unit Response Performance: Primary Unit

















First Truck All		Incident Count % <= Baseline	2006
			Minutes
Turn-Out Time		87.06%	1.64
Travel Time		81.39%	6.21
Total Response Time		84.08%	7.85
			2007
			Minutes
Turn-Out Time		88.43%	1.55
Travel Time		79.39%	6.38
Total Response Time		83.23%	7.93
			2008
			Minutes
Turn-Out Time		85.73%	1.7
Travel Time		76.91%	6.52
Total Response Time		80.29%	8.22
			2009
			Minutes
Turn-Out Time		85.12%	1.72
Travel Time		73.23%	6.62
Total Response Time		79.14%	8.34
			2010
			Minutes
**Includes Call Processing Time			
Call Processing Time		47.26%	3.45
Turn-Out Time		89.34%	1.52
Travel Time		69.64%	6.93
Total Response Time		68.07%	11.9



Distribution:

Distribution relays a geographical analysis of first-due resources to provide initial incident action to achieve specific benchmarks and goals. Distribution also assures quick deployment in order to successfully mitigate the requirements of the emergency incident.

The City of Fayetteville currently staffs 16 fire stations with 306 assigned personnel and a daily minimum staffing of 87. Personnel are assigned to 16 engine companies, 5 truck companies, 2 heavy rescue companies, 4 squads, and 3 battalion commanders. Specific units and their stations are identified below:

-  Station 1: E1, E16, T1, SQ1
-  Station 2: E2
-  Station 3: E3, T3
-  Station 4: E4
-  Station 5: E5, SQ5
-  Station 6: E6, T6
-  Station 7: E7, SQ7
-  Station 8: E8, RES8
-  Station 9: E9, T9, BC2
-  Station 10: SF1, SF2
-  Station 11: E11, T11
-  Station 12: E12
-  Station 14: E14, RES14, BC1
-  Station 15: E15
-  Station 17: E17, SQ17, BC3
-  Station 19: E19



Distribution of Responses by Station

Station	2006	%	2007	%	2008	%	2009	%	2010	%
1	2,436	12.89%	2,381	11.68%	2,855	12.62%	2,273	11.95%	2,704	10.73%
2	771	4.08%	908	4.45%	1,048	4.63%	876	3.77%	971	3.85%
3	1,707	9.03%	1,832	8.98%	1,942	8.58%	2,001	8.62%	2,366	9.39%
4	1,332	7.05%	1,431	7.02%	1,606	7.10%	1,620	6.98%	1,723	6.83%
5	2,048	10.84%	2,224	10.91%	2,407	10.64%	2,529	10.89%	2,744	10.89%
6	1,739	9.20%	1,913	9.38%	2,028	8.97%	1,984	8.55%	1,932	7.66%
7	914	4.84%	1,036	5.08%	1,133	5.01%	1,157	4.98%	1,149	4.56%
8	1,122	5.94%	1,126	5.52%	1,244	5.50%	1,361	5.60%	1,680	6.66%
9	1,925	10.19%	2,018	9.90%	2,276	10.06%	2,341	10.08%	2,549	10.11%
10	29	0.15%	39	0.19%	27	0.11%	40	0.17%	35	0.13%
11	649	3.43%	622	3.05%	606	2.68%	713	3.07%	696	2.76%
12	921	4.87%	1,047	5.13%	1,059	4.68%	1,160	4.99%	1,239	4.91%
14	1,472	7.79%	1,645	8.07%	1,886	8.34%	1,940	8.36%	2,016	8.00%
15	430	2.27%	615	3.01%	771	3.41%	742	3.19%	885	3.51%
16	None	0.00%	None	0.00%	None	0.00%	None	0.00%	3	0.01%
17	1,062	5.62%	1,165	5.71%	1,301	5.75%	1,389	5.98%	1,510	5.99%
19	None	0.00%	None	0.00%	None	0.00%	108	0.46%	605	2.40%
ATF	None	0.00%	2	0.00%	None	0.00%	None	0.00%	None	0.00%
CO2	2	0.01%	1	0.00%	None	0.00%	4	0.01%	1	0.00%
CO3	None	0.00%	6	0.02%	5	0.02%	6	0.02%	2	0.00%
CO5	145	0.76%	150	0.73%	168	0.74%	198	0.85%	145	0.57%
CO7	None	0.00%	1	0.00%	3	0.01%	1	0.00%	None	0.00%
CO10	4	0.02%	3	0.01%	16	0.07%	6	0.02%	None	0.00%
CO13	174	0.92%	213	1.04%	227	1.00%	253	1.09%	241	0.95%
CO15	None	0.00%	1	0.00%	None	0.00%	2	0.01%	None	0.00%
CO21	2	0.01%	1	0.00%	None	0.00%	None	0.00%	None	0.00%
FBFD	0	0.00%	1	0.00%	None	0.00%	None	0.00%	None	0.00%
Total:	18,884		20,381		22,608		22,704		25,196	



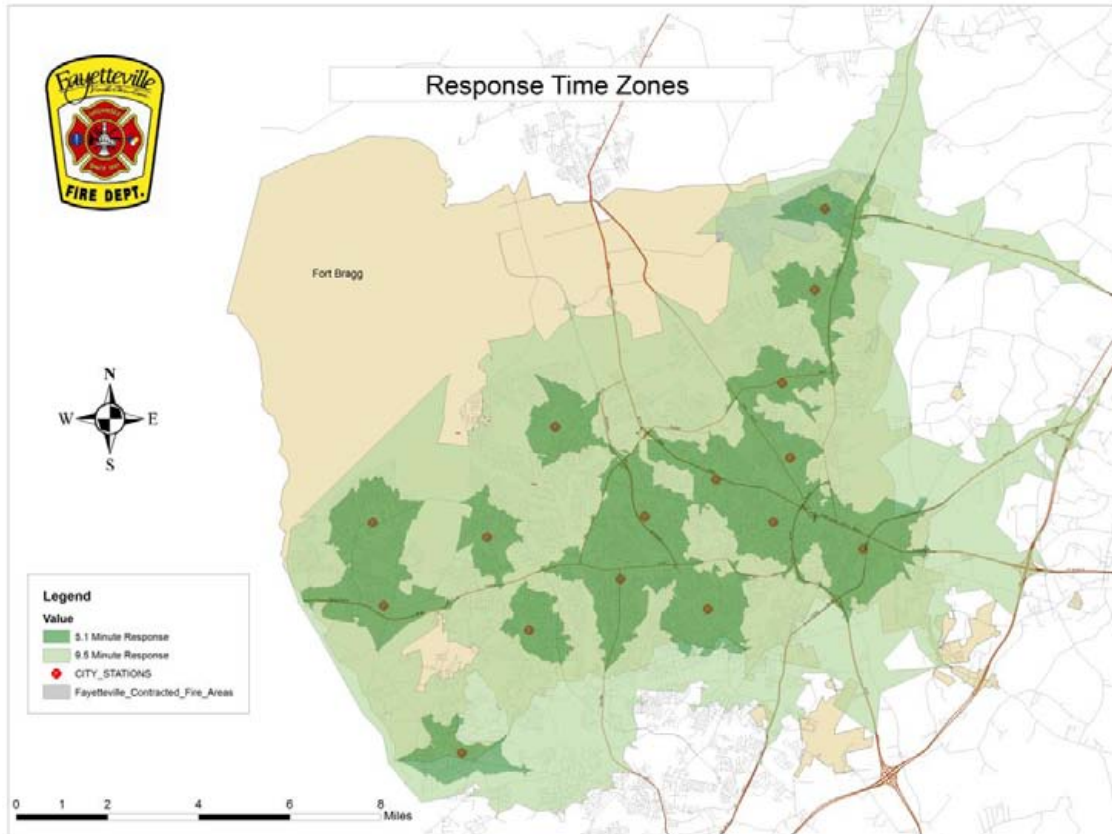
Distribution of Responses by Percentage

Station	2006	%	2007	%	2008	%	2009	%	2010	%
1	2,436	12.89%	2,381	11.68%	2,855	12.62%	2,273	11.95%	2,704	10.73%
5	2,048	10.84%	2,224	10.91%	2,407	10.64%	2,529	10.89%	2,744	10.89%
9	1,925	10.19%	2,018	9.90%	2,276	10.06%	2,341	10.08%	2,549	10.11%
6	1,739	9.20%	1,913	9.38%	2,028	8.97%	1,984	8.55%	1,932	7.66%
3	1,707	9.03%	1,832	8.98%	1,942	8.58%	2,001	8.62%	2,366	9.39%
14	1,472	7.79%	1,645	8.07%	1,886	8.34%	1,940	8.36%	2,016	8.00%
4	1,332	7.05%	1,431	7.02%	1,606	7.10%	1,620	6.98%	1,723	6.83%
8	1,122	5.94%	1,126	5.52%	1,244	5.50%	1,361	5.60%	1,680	6.66%
17	1,062	5.62%	1,165	5.71%	1,301	5.75%	1,389	5.98%	1,510	5.99%
12	921	4.87%	1,047	5.13%	1,059	4.68%	1,160	4.99%	1,239	4.91%
7	914	4.84%	1,036	5.08%	1,133	5.01%	1,157	4.98%	1,149	4.56%
2	771	4.08%	908	4.45%	1,048	4.63%	876	3.77%	971	3.85%
11	649	3.43%	622	3.05%	606	2.68%	713	3.07%	696	2.76%
15	430	2.27%	615	3.01%	771	3.41%	742	3.19%	885	3.51%
CO13	174	0.92%	213	1.04%	227	1.00%	253	1.09%	241	0.95%
CO5	145	0.76%	150	0.73%	168	0.74%	198	0.85%	145	0.57%
10	29	0.15%	39	0.19%	27	0.11%	40	0.17%	35	0.13%
CO10	4	0.02%	3	0.01%	16	0.07%	6	0.02%	None	0.00%
CO2	2	0.01%	1	0.00%	None	0.00%	4	0.01%	1	0.00%
CO21	2	0.01%	1	0.00%	None	0.00%	None	0.00%	None	0.00%
16	None	0.00%	None	0.00%	None	0.00%	None	0.00%	3	0.01%
19	None	0.00%	None	0.00%	None	0.00%	108	0.46%	605	2.40%
ATF	None	0.00%	2	0.00%	None	0.00%	None	0.00%	None	0.00%
CO3	None	0.00%	6	0.02%	5	0.02%	6	0.02%	2	0.00%
CO7	None	0.00%	1	0.00%	3	0.01%	1	0.00%	None	0.00%
CO15	None	0.00%	1	0.00%	None	0.00%	2	0.01%	None	0.00%
FBFD	0	0.00%	1	0.00%	None	0.00%	None	0.00%	None	0.00%
18,884		20,381		22,608		22,704		25,196		

A thorough analysis of our response data indicates the Fire Districts incident call volume does not cause concern with its ability to deliver appropriate resources to calls for emergency service in a timely manner.



Station Distribution by S.O.C. Response Time





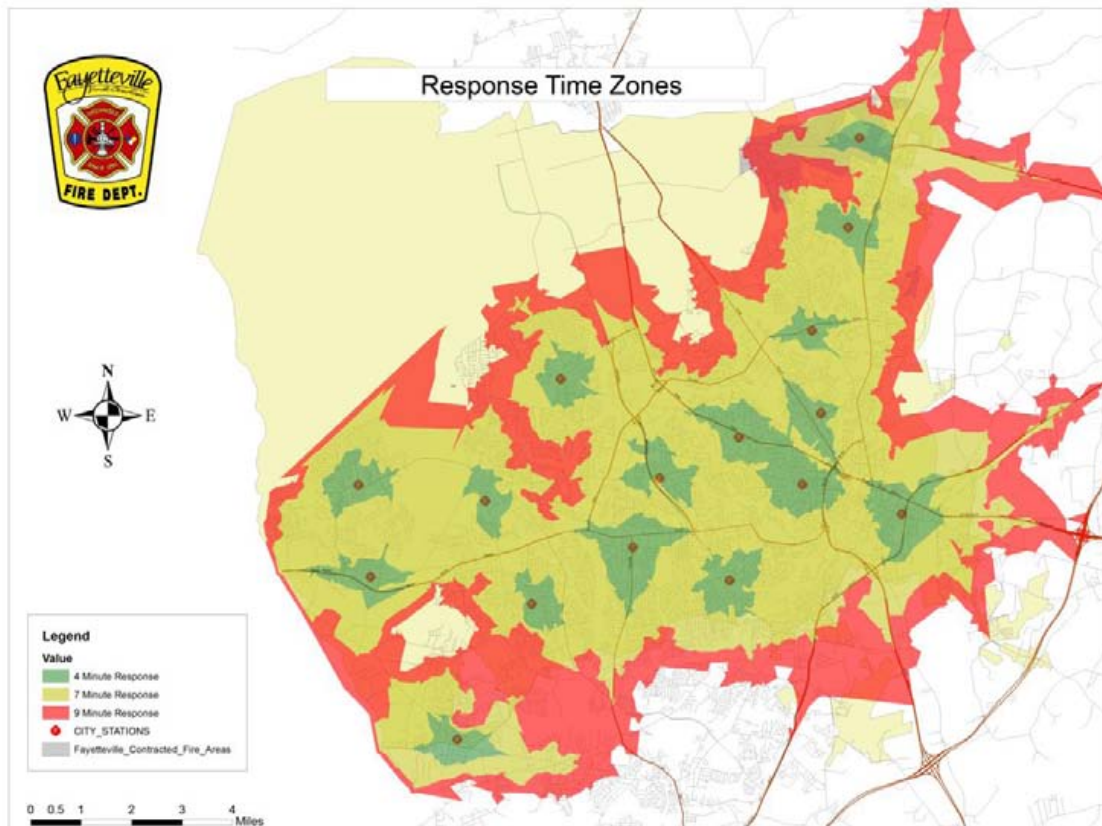
Concentration:

Concentration is the analysis of the arrangement of multiple resources with particular emphasis on the spacing of available resources in order to provide an effective resource at calls for service within the specified time frames. Concentration looks at historical response data utilizing computer analysis to determine effective response criteria.

This type of analysis provides data to ensure that resources are placed in strategic locations to provide coverage to response zones so to ensure our ability to provide an effective response force on the scene of all emergency incidents in a timely manner.

The analysis of the fire districts response times in order of unit arrival at the incident suggests the department is achieving concentration of critical resources quickly compared to other comparable departments.

Station Concentration by Response Time



**Unit Reliability:**

Reliability is the documentation of historical data to analyze the fire districts ability to meet performance expectations even if resources are committed on an existing call for service. Reliability analysis documents how often a primary resource did not respond to a call for service in its first due area. This analysis simply takes into account the primary units inability to respond to a call for service in its first due area.

To accomplish the analysis, historical data is retrieved and examined to determine duplicate calls for service while the primary unit is on another incident. Station reliability was analyzed to determine how often the primary unit was not able to respond to a duplicate call for service. This analysis is referred to as “overlapping incidents”.

Analyzing this response data allows the department to review and revise response patterns, move up cover plans, and other conditions to ensure maximum coverage levels are maintained during times of multiple calls for service. This data indicates that the fire districts call volume and reliability of resources is allowing the department to deliver appropriate resources to incidents in a timely manner.

Station Reliability

		2006		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	88.59%	2,436	2,158	278
2	98.44%	771	759	12
3	93.26%	1,707	1,592	115
4	97.75%	1,332	1,302	30
5	92.14%	2,048	1,887	161
6	89.94%	1,739	1,564	175
7	98.58%	914	901	13
8	97.68%	1,122	1,096	26
9	89.71%	1,925	1,727	198
10	100.00%	29	29	0
11	94.14%	649	611	38
12	97.88%	991	970	21
14	94.02%	1,472	1,384	88
15	99.07%	430	426	4
17	98.49%	1,062	1,046	16



Fayetteville Fire/Emergency Management

Standard of Coverage

		2007		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	88.37%	2,381	2,104	277
2	98.24%	908	892	16
3	92.03%	1,832	1,686	146
4	97.13%	1,431	1,390	41
5	90.20%	2,224	2,006	218
6	89.75%	1,913	1,717	196
7	98.07%	1,036	1,016	20
8	99.29%	1,126	1,118	8
9	90.98%	2,018	1,836	182
10	100.00%	39	39	0
11	96.95%	622	603	19
12	98.09%	1,047	1,027	20
14	93.68%	1,645	1,541	104
15	98.37%	615	605	10
17	98.11%	1,165	1,143	22

		2008		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	85.22%	2,855	2,433	422
2	98.57%	1,048	1,033	15
3	90.78%	1,942	1,763	179
4	98.26%	1,606	1,578	28
5	89.07%	2,407	2,144	263
6	89.25%	2,028	1,810	218
7	95.06%	1,133	1,077	56
8	98.47%	1,244	1,225	19
9	88.93%	2,276	2,024	252
10	100.00%	27	27	0
11	94.88%	606	575	31
12	97.92%	1,059	1,037	22
14	91.30%	1,886	1,722	164
15	98.96%	771	763	8
17	94.93%	1,301	1,235	66



Fayetteville Fire/Emergency Management

Standard of Coverage

		2009		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	86.62%	2,773	2,402	371
2	99.09%	876	868	8
3	89.21%	2,001	1,785	216
4	97.47%	1,620	1,579	41
5	89.72%	2,529	2,269	260
6	90.78%	1,984	1,801	183
7	95.68%	1,157	1,107	50
8	95.37%	1,361	1,298	63
9	89.83%	2,341	2,103	238
10	100.00%	40	40	0
11	94.81%	713	676	37
12	98.10%	1,160	1,138	22
14	93.66%	1,940	1,817	123
15	98.79%	742	733	9
17	93.95%	1,389	1,305	84
19	100.00%	108	108	0

		2010		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	86.91%	2,704	2,350	354
2	99.18%	971	963	8
3	89.86%	2,366	2,126	240
4	97.27%	1,723	1,676	47
5	90.09%	2,744	2,472	272
6	91.56%	1,932	1,769	163
7	96.52%	1,149	1,109	40
8	92.08%	1,680	1,547	133
9	90.11%	2,549	2,297	252
10	100.00%	35	35	0
11	94.25%	696	656	40
12	98.39%	1,239	1,219	20
14	92.56%	2,016	1,866	150
15	98.76%	885	874	11
17	94.97%	1,510	1,434	76
19	98.84%	605	598	7



Station Reliability by Percentage

		2006		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	88.59%	2,436	2,158	278
9	89.71%	1,925	1,727	198
6	89.94%	1,739	1,564	175
5	92.14%	2,048	1,887	161
3	93.26%	1,707	1,592	115
14	94.02%	1,472	1,384	88
11	94.14%	649	611	38
8	97.68%	1,122	1,096	26
4	97.75%	1,332	1,302	30
12	97.88%	991	970	21
2	98.44%	771	759	12
17	98.49%	1,062	1,046	16
7	98.58%	914	901	13
15	99.07%	430	426	4
10	100.00%	29	29	0

		2007		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	88.37%	2,381	2,104	277
6	89.75%	1,913	1,717	196
5	90.20%	2,224	2,006	218
9	90.98%	2,018	1,836	182
3	92.03%	1,832	1,686	146
14	93.68%	1,645	1,541	104
11	96.95%	622	603	19
4	97.13%	1,431	1,390	41
7	98.07%	1,036	1,016	20
12	98.09%	1,047	1,027	20
17	98.11%	1,165	1,143	22
2	98.24%	908	892	16
15	98.37%	615	605	10
8	99.29%	1,126	1,118	8
10	100.00%	39	39	0



		2008		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	85.22%	2,855	2,433	422
9	88.93%	2,276	2,024	252
5	89.07%	2,407	2,144	263
6	89.25%	2,028	1,810	218
3	90.78%	1,942	1,763	179
14	91.30%	1,886	1,722	164
11	94.88%	606	575	31
17	94.93%	1,301	1,235	66
7	95.06%	1,133	1,077	56
12	97.92%	1,059	1,037	22
4	98.26%	1,606	1,578	28
8	98.47%	1,244	1,225	19
2	98.57%	1,048	1,033	15
15	98.96%	771	763	8
10	100.00%	27	27	0

		2009		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	86.62%	2,773	2,402	371
3	89.21%	2,001	1,785	216
5	89.72%	2,529	2,269	260
9	89.83%	2,341	2,103	238
6	90.78%	1,984	1,801	183
14	93.66%	1,940	1,817	123
17	93.95%	1,389	1,305	84
11	94.81%	713	676	37
8	95.37%	1,361	1,298	63
7	95.68%	1,157	1,107	50
4	97.47%	1,620	1,579	41
12	98.10%	1,160	1,138	22
15	98.79%	742	733	9
2	99.09%	876	868	8
10	100.00%	40	40	0
19	100.00%	108	108	0



		2010		
Station	% Reliability	Primary Total Incidents	Primary Unit	Other Unit
1	86.91%	2,704	2,350	354
3	89.86%	2,366	2,126	240
5	90.09%	2,744	2,472	272
9	90.11%	2,549	2,297	252
6	91.56%	1,932	1,769	163
8	92.08%	1,680	1,547	133
14	92.56%	2,016	1,866	150
11	94.25%	696	656	40
17	94.97%	1,510	1,434	76
7	96.52%	1,149	1,109	40
4	97.27%	1,723	1,676	47
12	98.39%	1,239	1,219	20
15	98.76%	885	874	11
19	98.84%	605	598	7
2	99.18%	971	963	8
10	100.00%	35	35	0



Component F: Performance Objectives and Performance Measures

Performance Goal:

The Fayetteville Fire/Emergency Management Department (FFEMD) shall limit the risk to our communities and our citizens from injury, death, and property damage associated with fire incidents, accidents, illness, explosions, hazardous materials incidents, and other natural or manmade emergencies through prevention and response.

Performance Level Objectives are approved by the Fayetteville city council based on industry standards adopted from NFPA 1710 and outline the commitment of the city and the FFEMD to meet pre-established objectives regarding the timeliness of responses to specific risks. The following objectives are the result of a thorough evaluation and categorization of our risks. Specific performance measures have been established based on our analysis of response risks and our department's mission.

Performance Objective: Incident Responses **Baseline:**

FFEMD performance level baselines to fire incidents were established for total response time utilizing three years of historical response data. Total baseline response times to fire incidents within the department's jurisdiction include call processing/dispatch time, unit turnout time, and unit travel time. For all emergency incidents, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient resources to stop the escalation of fire, reduce life and property loss, and keep the fire to the area of involvement upon arrival. Initial response resources shall be capable of containing the fire, rescuing at risk victims, and performing salvage operations while providing for the safety of the responders and general public.



Low Fire Risk **Baseline:**

DISTRIBUTION STANDARD FOR LOW FIRE RISKS

For 90% of responses to LOW Fire Risks, the first due unit staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, an uninterrupted water supply, fire fighting and rescue tactics while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LOW FIRE RISKS

For 90% of responses to LOW Fire Risks, the effective response force staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, an uninterrupted water supply, fire fighting and rescue tactics while utilizing safe operational procedures.

Moderate Fire Risk **Baseline:**

DISTRIBUTION STANDARD FOR MODERATE FIRE RISKS

For 90% of responses to MODERATE Fire Risks, the first due unit staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, and initiating fire or rescue tactics while utilizing safe operational procedures.



CONCENTRATION STANDARD FOR MODERATE FIRE RISKS

For 90% of responses to MODERATE Fire Risks, the effective response force staffed with a minimum of fourteen personnel shall arrive within fifteen minutes zero seconds total response time. These units shall be capable of establishing an uninterrupted water supply, fire fighting and rescue tactics as outlined in the critical task analysis while utilizing safe operational procedures.

High Fire Risk Baseline:

DISTRIBUTION STANDARD FOR HIGH FIRE RISKS

For 90% of responses to HIGH Fire Risks, the first in Engine Company staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, and initiating fire or rescue tactics while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR HIGH FIRE RISKS

For 90% of responses to HIGH Fire Risks, the effective response force staffed with a minimum of twenty four personnel shall arrive within twenty minutes zero seconds total response time. These units shall be capable of establishing an uninterrupted water supply, fire fighting and rescue tactics as outlined in the critical task analysis while utilizing safe operational procedures.



Performance Objective: Medical Responses Baseline:

For all medical incidents, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient resources and equipped personnel to provide medical services that will stabilize the situation, provide care and support to the victim, and reduce, reverse or eliminate the conditions that have caused the emergency while also providing safety for the responders and the general public.

Level I Medical Baseline:

DISTRIBUTION STANDARD FOR LEVEL I MEDICAL RESPONSES

For 90% of responses to LEVEL I Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

CONCENTRATION METHOD FOR LEVEL I MEDICAL RESPONSES

For 90% of responses to LEVEL I Medical Incidents, the effective response force staffed with a minimum of two personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.



Level II Medical **Baseline:**

DISTRIBUTION STANDARD FOR LEVEL II MEDICAL RESPONSES

For 90% of responses to LEVEL II Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II MEDICAL RESPONSES

For 90% of responses to LEVEL II Medical Incidents, the effective response force staffed with a minimum of five personnel shall arrive within eleven minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

Level III Medical **Baseline:**

DISTRIBUTION STANDARD FOR LEVEL III MEDICAL RESPONSES

For 90% of responses to LEVEL III Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.



CONCENTRATION STANDARD FOR LEVEL III MEDICAL

RESPONSES - For 90% of responses to LEVEL III Medical Incidents, the effective response force staffed with a minimum of eight personnel shall arrive within twelve minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

Performance Objective: Technical Rescue Responses Baseline:

For all incidents where technical rescue is required, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient personnel and equipment to safely stabilize the incident and extricate the patient(s) from the emergency situation or location without causing further harm to the patient, responders, citizens or the environment. These incident types include but are not limited to child lock in's, vehicle pin-ins, vehicle roll over's, entrapments, structural collapse events, confined space and trench rescue incidents.

Level I Rescue Baseline:

DISTRIBUTION STANDARD FOR LEVEL I RESCUE RESPONSES

For 90% of responses to LEVEL I Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.



CONCENTRATION STANDARD FOR LEVEL I RESCUE RESPONSES

For 90% of responses to LEVEL I Rescue Incidents, the effective response force staffed with a minimum of three personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

Level II Rescue Baseline:

DISTRIBUTION STANDARD FOR LEVEL II RESCUE RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II RESCUE RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the effective response force staffed with a minimum of ten personnel shall arrive within thirteen minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing extrication equipment, remove patients from harm while following safe operational procedures.



Level III Rescue **Baseline:**

DISTRIBUTION STANDARD FOR LEVEL III RESCUE RESPONSES

For 90% of responses to LEVEL III Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within ten minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL III RESCUE RESPONSES

For 90% of responses to LEVEL III Rescue Incidents, the effective response force staffed with a minimum of twenty four personnel shall arrive within twenty minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing extrication equipment, remove patients from harm while following safe operational procedures.



Performance Objective: Hazardous Materials Responses Baseline:

For all incidents where hazardous materials have been released that may pose a threat to citizens or the environment, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient personnel and equipment to isolate the incident, identify the product released, slow or stop the release of product(s), initiate an evacuation, rescue, or shelter in place procedures, contain spills, and conduct air monitoring while also providing safety for the responders and the general public.

Level I Hazardous Materials Baseline:

DISTRIBUTION STANDARD FOR LEVEL I HAZ-MAT RESPONSES

For 90% of responses to LEVEL I Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL I HAZ-MAT RESPONSES

For 90% of responses to LEVEL I Haz-Mat Incidents, the effective response force staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.



Level II Hazardous Materials **Baseline:**

DISTRIBUTION STANDARD FOR LEVEL II HAZ-MAT RESPONSES

For 90% of responses to LEVEL II Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II HAZ-MAT RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the effective response force staffed with a minimum of eight personnel shall arrive within twenty minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, providing rescue procedures, controlling product release, providing air monitoring, and perform decontamination activities while utilizing safe operational procedures.



Level III Hazardous Materials **Baseline:**

DISTRIBUTION STANDARD FOR LEVEL III HAZ-MAT RESPONSES

For 90% of responses to LEVEL III Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within nine minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL III HAZ-MAT RESPONSES

For 90% of responses to LEVEL III Haz-Mat Incidents, the effective response force staffed with a minimum of eighteen personnel shall arrive within thirty minutes thirty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, providing rescue procedures, controlling product release, providing air monitoring, and perform decontamination activities while utilizing safe operational procedures.



Performance Objective: Incident Responses Benchmark:

A benchmark is defined as a standard from which something can be judged. Utilizing benchmark performance measuring tools and searching for best practice procedures will ultimately define superior performance. This Standards of Coverage document uses a combination of standards from NFPA 1710, 1410, 1221, and the Insurance Services Office (ISO) grading schedule for determining response performance objectives to Fires, Emergency Medical Services, Technical Rescue, and Hazardous Materials responses. The Fayetteville Fire/Emergency Management Department utilizes historical response data to measure response performance and maintain set levels of service criteria. The benchmark (Goal) for total response time is composed of one minute for 911 emergency calls processing, one minute twenty seconds for unit turnout time, and five minutes travel time to the emergency incident.

Low Fire Risk Benchmark:

DISTRIBUTION STANDARD FOR LOW FIRE RISKS

For 90% of responses to LOW Fire Risks, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, an uninterrupted water supply, fire fighting and rescue tactics while utilizing safe operational procedures.



CONCENTRATION STANDARD FOR LOW FIRE RISKS

For 90% of responses to LOW Fire Risks, the effective response force staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, an uninterrupted water supply, fire fighting and rescue tactics while utilizing safe operational procedures.

Moderate Fire Risk Benchmark:

DISTRIBUTION STANDARD FOR MODERATE FIRE RISKS

For 90% of responses to MODERATE Fire Risks, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, and initiating fire or rescue tactics while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR MODERATE FIRE RISKS

For 90% of responses to MODERATE Fire Risks, the effective response force staffed with a minimum of fifteen personnel shall arrive within ten minutes twenty seconds total response time. These units shall be capable of establishing an uninterrupted water supply, fire fighting and rescue tactics as outlined in the critical task analysis while utilizing safe operational procedures.



High Fire Risk **Benchmark:**

DISTRIBUTION STANDARD FOR HIGH FIRE RISKS

For 90% of responses to HIGH Fire Risks, the first in Engine Company staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, and initiating fire or rescue tactics while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR HIGH FIRE RISKS

For 90% of responses to HIGH Fire Risks, the effective response force staffed with a minimum of twenty four personnel shall arrive within fifteen minutes twenty seconds total response time. These units shall be capable of establishing an uninterrupted water supply, fire fighting and rescue tactics as outlined in the critical task analysis while utilizing safe operational procedures.



Performance Objective: Medical Responses Benchmark:

For all medical incidents, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient resources and equipped personnel to provide medical services that will stabilize the situation, provide care and support to the victim, and reduce, reverse or eliminate the conditions that have caused the emergency while also providing safety for the responders and the general public.

Level I Medical Benchmark:

DISTRIBUTION STANDARD FOR LEVEL I MEDICAL RESPONSES

For 90% of responses to LEVEL I Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within six minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

CONCENTRATION METHOD FOR LEVEL I MEDICAL RESPONSES

For 90% of responses to LEVEL I Medical Incidents, the effective response force staffed with a minimum of two personnel shall arrive within six minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.



Level II Medical **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL II MEDICAL RESPONSES

For 90% of responses to LEVEL II Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within six minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II MEDICAL RESPONSES

For 90% of responses to LEVEL II Medical Incidents, the effective response force staffed with a minimum of five personnel shall arrive within seven minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

Level III Medical **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL III MEDICAL RESPONSES

For 90% of responses to LEVEL III Medical Incidents, the first due unit staffed with a minimum of two personnel shall arrive within six minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.



CONCENTRATION STANDARD FOR LEVEL III MEDICAL

RESPONSES - For 90% of responses to LEVEL III Medical Incidents, the effective response force staffed with a minimum of eight personnel shall arrive within eight minutes zero seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and assisting the county EMS units with patient care while utilizing safe operational procedures.

Performance Objective: Technical Rescue Responses Benchmark:

For all incidents where technical rescue is required, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient personnel and equipment to safely stabilize the incident and extricate the patient(s) from the emergency situation or location without causing further harm to the patient, responders, citizens or the environment. These incident types include but are not limited to child lock in's, vehicle pin-ins, vehicle roll over's, entrapments, structural collapse events, confined space and trench rescue incidents.

Level I Rescue Benchmark:

DISTRIBUTION STANDARD FOR LEVEL I RESCUE RESPONSES

For 90% of responses to LEVEL I Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.



CONCENTRATION STANDARD FOR LEVEL I RESCUE RESPONSES

For 90% of responses to LEVEL I Rescue Incidents, the effective response force staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

Level II Rescue Benchmark:

DISTRIBUTION STANDARD FOR LEVEL II RESCUE RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II RESCUE RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the effective response force staffed with a minimum of ten personnel shall arrive within ten minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing extrication equipment, remove patients from harm while following safe operational procedures.



Level III Rescue **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL III RESCUE RESPONSES

For 90% of responses to LEVEL III Rescue Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing tools and equipment, remove patients from harm while following safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL III RESCUE RESPONSES

For 90% of responses to LEVEL III Rescue Incidents, the effective response force staffed with a minimum of twenty four personnel shall arrive within fifteen minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, providing basic life support with AED capabilities, and utilizing extrication equipment, remove patients from harm while following safe operational procedures.

Performance Objective: Hazardous Materials Responses Benchmark:

For all incidents where hazardous materials have been released that may pose a threat to citizens or the environment, the Fayetteville Fire/Emergency Management Department shall arrive in a timely manner with sufficient personnel and equipment to isolate the incident, identify the product released, slow or stop the release of product(s), initiate an evacuation, rescue, or shelter in place procedures, contain spills, and conduct air monitoring while also providing safety for the responders and the general public.



Level I Hazardous Materials **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL I HAZ-MAT RESPONSES

For 90% of responses to LEVEL I Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary while utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL I HAZ-MAT RESPONSES

For 90% of responses to LEVEL I Haz-Mat Incidents, the effective response force staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.



Level II Hazardous Materials **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL II HAZ-MAT RESPONSES

For 90% of responses to LEVEL II Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL II HAZ-MAT RESPONSES

For 90% of responses to LEVEL II Rescue Incidents, the effective response force staffed with a minimum of eight personnel shall arrive within fifteen minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, providing rescue procedures, controlling product release, providing air monitoring, and perform decontamination activities while utilizing safe operational procedures.



Level III Hazardous Materials **Benchmark:**

DISTRIBUTION STANDARD FOR LEVEL III HAZ-MAT RESPONSES

For 90% of responses to LEVEL III Haz-Mat Incidents, the first due unit staffed with a minimum of three personnel shall arrive within six minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, identifying isolation zones, providing defensive operations, notifying additional resources when necessary and utilizing safe operational procedures.

CONCENTRATION STANDARD FOR LEVEL III HAZ-MAT RESPONSES

For 90% of responses to LEVEL III Haz-Mat Incidents, the effective response force staffed with a minimum of eighteen personnel shall arrive within twenty minutes twenty seconds total response time. These units shall be capable of establishing command, scene size up, identifying product(s) involved, providing rescue procedures, controlling product release, providing air monitoring, and perform decontamination activities while utilizing safe operational procedures.



Fayetteville Fire/Emergency Management

Standard of Coverage

Response Category	Distinctions	Response Force	Total Units	Min # Personnel
Fire Category 1	Small Fires, Citizen Assist, Investigate Situation, Bomb Threats	1Eng	1	3
Fire Category 2	Large Vehicle, Brush, or Outside Fire -Fire Threatening Struct	2Eng,1Sq,1BC	4	9
Fire Category 3	Residential Fire Alarm	2Eng,1Trk	3	9
Fire Category 4	Commercial Fire Alarm	2Eng,1Trk,1BC	4	10
Fire Category 5	Moderate Hazard Structure Fire, High Hazard Fire Alarms	3Eng,1Trk,1Sq,1BC	6	15
Fire Category 6	High Hazard Structure Fire	4Eng,2Trk,2Sq,2BC	10	24
Medical Category 1	Single Patient, Breathing Verified	1Sq (Res,Eng or Trk)	1	2
Medical Category 2	2-4 Patients/Victims, Cardiac Arrest, Vehicle Crashes	1Eng,1Sq	2	5
Medical Category 3	More than 4 Patients/Victims	2Eng,1Sq,1BC	3	9
HazMat Category 1	Carbon Monox Alarm, Small Spills	1Eng (Trk)	1	3
HazMat Category 2	Large Spills, Residential Gas Leaks	1Eng,1BC,1HM	3	9
HazMat Category 3	Commercial / HiRisk Gas Leaks, Uncontained Product	2Eng,1Sq,1BC,2HM	6	19
Rescue Category 1	Lock In/Out, Single Engine or Truck	1Eng (Trk)	1	3
Rescue Category 2	Vehicle Crash Pin In / Rollover	1Eng,1Res,1Sq,1BC	4	11
Rescue Category 3	Rescue Incidents w/HazMat Involved	1Eng,1Res,1Sq,1BC,1HM	5	16
Rescue Category 4	Trench, Conf Space, Struct Collapse, Hi/Low Angle	1Eng,1Trk,1Sq,2Res,1BC,1HM	7	24
Mass Transit Category 1	Small Aircraft w/ Problem, Standby (Airport Property)	1Eng,1Sq,1CFR	3	7
Mass Transit Category 2	Large Aircraft w/ Problem, Standby (Airport Property)	2Eng,1Sq,1Res,1BC,2CFR	7	15
Mass Transit Category 3	Major Aircraft Incident-Crash or Fire (Airport Property)	2Eng,1Trk,1Sq,1Res,2BC,1HM,2CFR	10	25
Mass Transit Category 4	Major Highway, Rail, or Aircraft Incident-Crash or Fire	2Eng,1Trk,1Sq,1Res,2BC,1HM	8	23



Fayetteville Fire/Emergency Management

Standard of Coverage

Priority	Dispatch Nature Codes	Response Category									
		Description	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
1	ABDOMINAL PAIN / PROBLEMS										
01A01	1A1 ABDOMINAL PAIN	Ambulance Only									
01C01	1C1 ABDOMINAL PAIN	M1			1						2
01C02	1C2 ABDOMINAL PAIN	M1			1						2
01C03	1C3 ABDOMINAL PAIN	M1			1						2
01C04	1C4 ABDOMINAL PAIN	M1			1						2
01C05	1C5 ABDOMINAL PAIN	M1			1						2
01C06	1C6 ABDOMINAL PAIN	M1			1						2
01D01	1D1 ABDOMINAL PAIN NOT ALERT	M1			1						2
2	ALLERGIES										
02A01	2A1 ALLERGY	Ambulance Only									
02A02	2A2 ALLERGY	Ambulance Only									
02B01	2B1 ALLERGY	Ambulance Only									
02C01	2C1 ALLERGIC REACT DIFF BREATH	M1			1						2
02C02	2C2 ALLERGY	M1			1						2
02D01	2D1 ALLERGIC REACT NOT ALERT	M1			1						2
02D02	2D2 ALLERGY	M1			1						2
02D03	2D3 BEE ATTACK	M1			1						2
02D04	2D4 SNAKEBITE	M1			1						2
02E01	2E1 ALLERGIC REACT INEFF BREATH	M2	1		1						5
3	ANIMAL BITES / ATTACKS										
03A01	3A1 ANIMAL ATTACK	Ambulance Only									
03A02	3A2 ANIMAL ATTACK	Ambulance Only									
03A03	3A3 ANIMAL ATTACK	Ambulance Only									
03B01	3B1 ANIMAL ATTACK	M1			1						2
03B02	3B2 ANIMAL ATTACK	M1			1						2
03B03	3B3 ANIMAL ATTACK	Ambulance Only									
03D01	3D1 ANIMAL ATTK UNRESPONSIVE	M2	1		1						5
03D02	3D2 ANIMAL ATTACK NOT ALERT	M1			1						2
03D03	3D3 ANIMAL ATTACK	M1			1						2
03D04	3D4 ANIMAL ATTACK	M1			1						2
03D05	3D5 LARGE ANIMAL ATTACK	M1			1						2
03D06	3D6 EXOTIC ANIMAL ATTACK	M1			1						2
03D07	3D7 MULTIPLE ANIMAL ATTACK	M1			1						2
4	ASSAULT										
04A01	4A1 ASSAULT	Ambulance Only									
04A02	4A2 ASSAULT	Ambulance Only									
04B01	4B1 ASSAULT	M1			1						2
04B02	4B2 ASSAULT SERIOUS BLEEDING	M1			1						2
04B03	4B3 ASSAULT	Ambulance Only									
04D01	4D1 ASSAULT SUBJ UNRESPONSIVE	M2	1		1						5
04D02	4D2 ASSAULT	M1			1						2
04D03	4D3 ASSAULT DIFF BREATHING	M1			1						2
04D04	4D4 ASSAULT MULTIPLE VICTIMS	M2	1		1						5



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
5 BACK PROBLEMS											
05A01	5A1 BACK PAIN	Ambulance Only									
05A02	5A2 BACK PAIN	Ambulance Only									
05C01	5C1 BACK PAIN	M1			1						2
05C02	5C2 BACK PAIN	M1			1						2
05C03	5C3 BACK PAIN SUBJ FAINTING	M1			1						2
05D01	5D1 BACK PAIN SUBJ NOT ALERT	M1			1						2
6 BREATHING PROBLEMS											
06C01	6C1 ABNORMAL BREATHING	M1			1						2
06D01	6D1 RESPIRATORY SUBJ NOT ALERT	M1			1						2
06D02	6D2 RESPIRATORY DIFF SPEAKING	M1			1						2
06D03	6D3 RESPIRATORY CHANGING COX OR	M1			1						2
06D04	6D4 RESPIRATORY CLAMMY SKIN	M1			1						2
06E01	6E1 RESPIRATORY INEFF BREATHING	M2			1						5
7 BURNS											
07A01	7A1 BURNS	Ambulance Only									
07A02	7A2 BURNS WITH FIRE ALARM	M2	1		1						9
07A03	7A3 BURNS	Ambulance Only									
07B01	7B1 BLAST INJURY BURNS	M1			1						2
07B02	7B2 BURNS	Ambulance Only									
07C01	7C1 BURNS TRAPPED IN BLDG FIRE	F5	3	1	1			1			15
07C02	7C2 BURNS SUBJ DIFF BREATHING	M1			1						2
07C03	7C3 BURNS MORE THAN 18 PERCENT	M1			1						2
07C04	7C4 SIGNIFICANT FACIAL BURNS	M1			1						2
07D01	7D1 BURNS MULTIPLE VICTIMS	M3	2		1			1			9
07D02	7D2 BURNED SUBJ UNRESPONSIVE	M2	1		1						5
07D03	7D3 BURNED SUBJECT NOT ALERT	M1			1						2
07D04	7D4 BURNED SUBJ DIFF SPEAKING	M1			1						2
8 CARBON MONOXIDE											
08B01	8B1 CARBON MONOXIDE	Ambulance Only									
08C01	8C1 CARB MONOX DIFF BREATHING	M1			1						2
08D01	8D1 CARB MONOX UNRESPONSIVE	M2	1		1						5
08D02	8D2 CARB MONOX SUBJ NOT ALERT	M1			1						2
08D03	8D3 CARB MONOX DIFF SPEAKING	M1			1						2
08D04	8D4 CARBON MONOX MULT VICTIMS	M3	2		1			1			9
08D05	8D5 CARBON MONOX UNKNOWN STATUS	M1			1						2
08O01	8omegas1CARBON MONOXIDE	F1	1		1						3
9 CARDIAC											
09B01	9B1 CARDIAC ARREST	Ambulance Only									
09D01	9D1 CARDIAC INEFFECT BREATHING	M2	1		1						5
09D02	9D2 CARDIAC ARREST	Ambulance									



Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
10	CHEST PAIN										
10A01	10A1 CHEST PAIN	Ambulance Only									
10C01	10C1 CHEST PAIN DIFF BREATHING	M1			1						2
10C02	10C2 CHESTPAIN CARDIAC HISTORY	M1			1						2
10C03	10C3 CHEST PAIN DRUG RELATED	M1			1						2
10C04	10C4 CHEST PAIN NORMAL RESP	M1			1						2
10D01	10D1 CHEST PAIN SUBJ NOT ALERT	M1			1						2
10D02	10D2 CHEST PAIN DIFF SPEAKING	M1			1						2
10D03	10D3 CHEST PAIN CHANGING COLOR	M1			1						2
10D04	10D4 CHEST PAIN CLAMMY SKIN	M1			1						2
11	CHOKING										
11A01	11A1 CHOKING	Ambulance Only									
11D01	11D1 CHOKING PARTIAL OBSTRUCT	M1			1						2
11D02	11D2 CHOKING SUBJ NOT ALERT	M1			1						2
11E01	11E1 CHOKING COMPLETE OBSTRUCT	M2	1		1						5
12	SEIZURES										
12A01	12A1 SEIZURES	Ambulance Only									
12A02	12A2 SEIZURE	Ambulance Only									
12A03	12A3 SEIZURE	Ambulance Only									
12B01	12B1 SEIZURES	M1			1						2
12C01	12C1 SEIZURE SUBJ NOT ALERT	M1			1						2
12C02	12C2 SEIZURE PREGNANT SUBJECT	M1			1						2
12C03	12C3 SEIZURE DIABETIC SUBJECT	M1			1						2
12D01	12D1 SEIZURESUBJ NOT BREATHING	M2	1		1						5
12D02	12D2 MULTIPLE SEIZURES	M1			1						2
12D03	12D3 SEIZURE INEFFECT BREATHING	M1			1						2
12D04	12D4 SEIZURE INEFFECT BREATHING	M1			1						2
13	DIABETIC										
13A01	13A1 DIABETIC SUBJECT ALERT	M1			1						2
13C01	13C1 DIABETIC SUBJ NOT ALERT	M1			1						2
13C02	13C2 DIABETIC	M1			1						2
13C03	13C3 DIABETIC	M1			1						2
13D01	13D1 UNCONSCIOUS DIABETIC	M1			1						2
14	DROWNING										
14A01	14A1 NEAR DROWNING SUBJ ALERT	Ambulance Only									
14B01	14B1 NEAR DROWNING SUBJ ALERT	M1			1						2
14B02	14B2 DROWNING UNKNOWN STATUS	M1			1						2
14C01	14C1 NEAR DROWNING DIFF BREATHING	M1			1						2
14D01	14D1 DROWNING UNRESPONSIVE	M2	1		1						5
14D02	14D2 DROWNING SUBJ NOT ALERT	M2	1		1						5
14D03	14D3 DIVING INJURY	M2	1		1						5
14D04	14D4 SCUBA ACCIDENT	M2	1		1						5



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
15	ELECTROCUTION										
15C01	15C1 ELECTROCUTION SUBJ ALERT	Ambulance Only									
15D01	15D1 ELECTROCUTION UNCONSCIOUS	M1			1						2
15D02	15D2 ELECTROCUTION	M1			1						2
15D03	15D3 ELECTROCUTION	M1			1						2
15D04	15D4 ELECTROCUTION	M1			1						2
15D05	15D5 ELECTROCUTION	M1			1						2
15D06	15D6 ELECTROCUTION NOT ALERT	M1			1						2
15D07	15D7 ELECTROCUTION	M1			1						2
15D08	15D8 ELECTROCUTION	M1			1						2
15E01	15E1 ELECTROCUTION	M2	1		1						5
16	EYE PROBLEM / INJURY										
16A01	16A1 EYE INJURY	Ambulance Only									
16A02	16A2 EYE INJURY	Ambulance Only									
16A03	16A3 EYE INJURY	Ambulance Only									
16B01	16B1 SEVERE EYE INJURY	M1			1						2
16D01	16D1 EYE INJURY SUBJ NOT ALERT	M1			1						2
17	FALLS										
17A01	17A1 FALL	M1			1						2
17A02	17A2 FALL	M1			1						2
17A03	17A3 FALL	Ambulance Only									
17B01	17B1 FALL WITH INJURIES	M1			1						2
17B02	17B2 FALL W/ SERIOUS BLEEDING	M1			1						2
17B03	17B3 FALL UNKNOWN STATUS	M1			1						2
17D01	17D1 FALL FROM EXTREME HEIGHT	M1			1						2
17D02	17D2 FALL SUBJ UNRESPONSIVE	M2	1		1						5
17D03	17D3 FALL SUBJ NOT ALERT	M1			1						2
17D04	17D4 FALL WITH DIFF BREATHING	M1			1						2
17D05	17D5 FALL WITH INJURIES	M1			1						2
18	HEADACHE										
18A01	18A1 HEADACHE	Ambulance Only									
18B01	18B1 HEADACHE	Ambulance Only									
18C01	18C1 HEADACHE SUBJ NOT ALERT	M1			1						2
18C02	18C2 HEADACHE DIFF BREATHING	M1			1						2
18C03	18C3 HEADACHE SPEECH PROBLEMS	M1			1						2
18C04	18C4 SEVERE HEADACHE	M1			1						2
18C05	18C5 HEADACHE WITH NUMBNESS	M1			1						2
18C06	18C6 HEADACHE WITH PARALYSIS	M1			1						2
18C07	18C7 HEADACHE	M1			1						2



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
19	HEART PROBLEMS										
19A01	19A1 HEART PROBLEMS	Ambulance Only									
19A02	19A2 HEART PROBLEMS	Ambulance Only									
19C01	19C1 INTERNAL DEFIB FIRING	M1			1						2
19C02	19C2 HEART PROBLEMS	M1			1						2
19C03	19C3 CHEST PAINS	M1			1						2
19C04	19C4 HEART PROBLEMS	M1			1						2
19C05	19C5 HEART PROBLEMS	M1			1						2
19C06	19C6 HEART PROBLEMS	M1			1						2
19C07	19C7 HEART PROBLEMS	Ambulance Only									
19D01	19D1 HEART PROB SUBJ NOT ALERT	M2	1		1						5
19D02	19D2 HEART PROBLEMS	M2	1		1						5
19D03	19D3 HEART PROBLEMS	M2	1		1						5
19D04	19D4 HEART PROBLEMS	M2	1		1						5
19D05	19D5 HEART PROBLEMS	M2	1		1						5
20	EXPOSURE TO HEAT OR COLD										
20A01	20A1 EXPOSURE	Ambulance Only									
20B01	20B1 EXPOSURE	Ambulance Only									
20B02	20B2 EXPOSURE	Ambulance Only									
20C01	20C1 EXPOSURE	M1			1						2
20D01	20D1 EXPOSURE SUBJ NOT ALERT	M1			1						2
20D02	20D2 EXPOSURE MULTIPLE VICTIMS	M2	1		1						5
21	HEMORRHAGE										
21A01	21A1 HEMORRHAGE	Ambulance Only									
21A02	21A2 HEMORRHAGE	Ambulance Only									
21B01	21B1 HEMORRHAGE	M1			1						2
21B02	21B2 SERIOUS HEMORRHAGE	M1			1						2
21B03	21B3 HEMORRHAGE	M1			1						2
21B04	21B4 HEMORRHAGE	M1			1						2
21C01	21C1 HEMORRHAGE	M1			1						2
21C02	21C2 HEMORRHAGE	M1			1						2
21D01	21D1 HEMORRHAGE UNRESPONSIVE	M2	1		1						5
21D02	21D2 HEMORRHAGE SUBJ NOT ALERT	M1			1						2
21D03	21D3 DANGEROUS HEMORRHAGE	M1			1						2
21D04	21D4 HEMORRHAGE	M1			1						2
22	ENTRAPMENTS (NON-VEHICLE)										
22A01	22A1 SUBJECT TRAPPED	Ambulance Only									
22B01	22B1 SUBJECT TRAPPED	M1			1						2
22B02	22B2 SUBJECT TRAPPED	M1			1						2
22B03	22B3 SUBJECT TRAPPED	Ambulance Only									
22D01	22D1 MECHANICAL ENTRAPMENT	R2	1		1		1				11
22D02	22D2 TRENCH RESCUE	R4	1		1		2			1	24
22D03	22D3 STRUCTURAL COLLAPSE	R4	1		1		2			1	24
22D04	22D4 CONFINED SPACE ENTRAPMENT	R4	1		1		2			1	24
22D05	22D5 SUBJECT TRAPPED	R2	1		1		1				11
22D06	22D6 SUBJECT TRAPPED	R2	1		1		1				11



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
23	OVERDOSE										
23B01	23B1 OVERDOSE	Ambulance Only			1				Yes		2
23C01	23C1 OVERDOSE SUBJ NOT ALERT	M1			1				Yes		2
23C02	23C2 OVERDOSE DIFF BREATHING	M1			1				Yes		2
23C03	23C3 OVERDOSE	M1			1				Yes		2
23C04	23C4 OVERDOSE	M1			1				Yes		2
23C05	23C5 OVERDOSE	M1			1				Yes		2
23C06	23C6 OVERDOSE	M1			1				Yes		2
23C07	23C7 OVERDOSE	Ambulance Only									
23C08	23C8 POISON CONTROL REQUEST	Ambulance Only									
23D01	23D1 OVERDOSE SUBJ UNCONSCIOUS	M1			1				Yes		2
23D02	23D2 OVERDOSE	M1			1				Yes		2
23001	23omega1 POISONING	M1			1						2
24	OB										
24A01	24A1 POSSIBLE MISCARRIAGE	Ambulance Only									
24B01	24B1 PREGNANCY	Ambulance Only									
24B02	24B2 PREGNANCY	Ambulance Only									
24C01	24C1 POSSIBLE MISSCARRIAGE	M1			1				Yes		2
24C02	24C2 PREGNANT SUBJECT BLEEDING	M1			1				Yes		2
24C03	24C3 CHILDBIRTH	Ambulance Only									
24D01	24D1 POSSIBLE BREECH BIRTH	M2	1		1				Yes		5
24D02	24D2 CHILDBIRTH	M2	1		1				Yes		5
24D03	24D3 CHILDBIRTH	M2	1		1				Yes		5
24D04	24D4 PREGNANT SUBJECT BLEEDING	M2	1		1				Yes		5
24D05	24D5 PREGNANCY COMPLICATIONS	M2	1		1						5
24D06	24D6 BABY BORN IN DISTRESS	M2	1		1						5
24D07	24D7 BIRTH MOTHER IN DISTRESS	M2	1		1						5
24001	24omega1 OB	M1			1						2
25	PSYCHIATRIC										
25A01	25A1 PSYCHIATRIC	Ambulance Only									2
25A02	25A2 PSYCHIATRIC	Ambulance Only									2
25B01	25B1 PSYCHIATRIC SUBJ BLEEDING	M1			1				Yes		2
25B02	25B2 PSYCHIATRIC SUBJ BLEEDING	M1			1				Yes		2
25B03	25B3 SUBJ THREATENING SUICIDE	M1			1				First		2
25B04	25B4 SUBJ THREATENING TO JUMP	M1			1				First		2
25B05	25B5 PSYCHIATRIC	M1			1				Yes		2
25B06	25B6 PSYCHIATRIC UKN TYPE CALL	M1			1				Yes		2
25D01	25D1 PSYCH SUBJ NOT ALERT	M1			1				Yes		2
25D02	25D2 PSYCH SUBJ SEVER BLEEDING	M1			1				Yes		2
26	SICK PERSON										
26A01	26A1 SICK SUBJECT	Ambulance Only									
26A02	26A2 SICK SUBJECT	Ambulance Only									
26B01	26B1 SICK SUBJ UNKNOWN STATUS	Ambulance Only									
26C01	26C1 SICK SUBJ UNCONSCIOUS	M1			1						2
26C02	26C2 SICK SUBJ DIFF BREATHING	M1			1						2
26C03	26C3 SICK SUBJECT	M1			1						2
26D01	26D1 SICK SUBJECT NOT ALERT	M1			1						2
26O01	26omega1 SICK SUBJECT	M1			1						2
26O02	26omega2 SICK SUBJECT	M1			1						2



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BC's	HazMat	CFR	Police	Min # of Fire Personnel
27	STABBING / SHOOTING										
27A01	27A1 SHOOTING OR STABBING	Ambulance Only									
27A01S	27A1 NON RECENT STABBING	Ambulance Only									
27A01G	27A1 NON RECENT GSW	Ambulance Only									
27A01P	27A1 NON RECENT PEN TRAUMA	Ambulance Only									
27A01X	27A1 SELF INFLICTED SHOOTING	Ambulance Only									
27B01	27B1 SHOOTING OR STABBING	M1		1						First	2
27B01S	27B1 STAB WOUND	M1		1						First	2
27B01G	27B1 GUN SHOT WOUND	M1		1						First	2
27B01P	27B1 PENETRATING TRAUMA	M1		1						First	2
27B01X	27B1 SELF INFLICTED SHOOTING	M1		1						First	2
27B02	27B2 SHOOTING OR STABBING	M1		1						First	2
27B02S	27B2 PERIPHERAL STAB WOUND	M1		1						First	2
27B02G	27B2 PERIPHERAL GSW	M1		1						First	2
27B02P	27B2 PENETRATING WOUND	M1		1						First	2
27B02X	27B2 SELF INFLICTED SHOOTING	M1		1						First	2
27B03	27B3 SHOOTING OR STABBING	M1		1						First	2
27B03S	27B3 STABBING SEVERE BLEEDING	M1		1						First	2
27B03G	27B3 GUNSHOT SEVERE BLEEDING	M1		1						First	2
27B03P	27B3 PENETRATING WOUND	M1		1						First	2
27B03X	27B3 SELF INFLICTED SHOOTING	M1		1						First	2
27B04	27B4 SHOOTING OR STABBING	M1		1						First	2
27B04S	27B4 STABBING UNKNOWN STATUS	M1		1						First	2
27B04G	27B4 SHOOTING UNKNOWN STATUS	M1		1						First	2
27B04P	27B4 PENETRATING WOUND UKN	M1		1						First	2
27B04X	27B4 SELF INFLICTED SHOOTING	M1		1						First	2
27B05	27B5 SHOOTING OR STABBING	M1		1						First	2
27B05S	27B5 POSSIBLE FATAL STABBING	M1		1						First	2
27B05G	27B5 POSSIBLE FATAL SHOOTING	M1		1						First	2
27B05P	27B5 POSSIBLE FATAL WOUND	M1		1						First	2
27B05X	27B5 POSSIBLE FATAL GUNSHOT	M1		1						First	2



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
27	STABBING / SHOOTING										
27D01	27D1 SHOOTING OR STABBING	M2	1		1					First	5
27D01S	27D1 STABBING SUBJ UNRESPONSIVE	M2	1		1					First	5
27D01G	27D1 SHOOTING SUBJ UNRESPONSIVE	M2	1		1					First	5
27D01P	27D1 UNRESPONSIVE SUBJECT	M2	1		1					First	5
27D01X	27D1 SELF INFLICTED SHOOTING	M2	1		1					First	5
27D02	27D2 SHOOTING OR STABBING	M1			1					First	2
27D02S	27D2 STABBED SUBJ NOT ALERT	M1			1					First	2
27D02G	27D2 SHOT SUBJ NOT ALERT	M1			1					First	2
27D02P	27D2 SUBJECT NOT ALERT	M1			1					First	2
27D02X	27D2 SELF INFLICTED SHOOTING	M1			1					First	2
27D03	27D3 SHOOTING OR STABBING	M1			1					First	2
27D03S	27D3 STABBED SUBJECT	M1			1					First	2
27D03G	27D3 GUNSHOT SUBJECT	M1			1					First	2
27D03P	27D3 WOUNDED SUBJECT	M1			1					First	2
27D03X	27D3 SELF INFLICTED SHOOTING	M1			1					First	2
27D04	27D4 SHOOTING OR STABBING	M1			1					First	2
27D04S	27D4 MULTIPLE STAB WOUNDS	M1			1					First	2
27D04G	27D4 MULTIPLE GUNSHOT WOUNDS	M1			1					First	2
27D04P	27D4 MULTIPLE WOUNDS	M1			1					First	2
27D04X	27D4 SELF INFLICTED GSW	M1			1					First	2
27D05	27D5 SHOOTING OR STABBING	M3	2		1		1			First	9
27D05S	27D5 MULTIPLE STABBED VICTIMS	M3	2		1		1			First	9
27D05G	27D5 MULTIPLE SHOOTING VICTIMS	M3	2		1		1			First	9
27D05P	27D5 MULTIPLE WOUNDED VICTIMS	M3	2		1		1			First	9
27D05X	27D5 MULTIPLE GUNSHOT VICTIMS	M3	2		1		1			First	9



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
28	STROKE										
28A01	28A1 STROKE	Ambulance Only									
28B01	28B1 STROKE	Ambulance Only									
28C01	28C1 STROKE SUBJECT NOT ALERT	M1			1						2
28C02	28C2 STROKE ABNORMAL BREATHING	M1			1						2
28C03	28C3 STROKE SPEECH PROBLEMS	M1			1						2
28C04	28C4 STROKE NUMBNESS	M1			1						2
28C05	28C5 STROKE VISION PROBLEMS	M1			1						2
28C06	28C6 STROKE SEVERE HEADACHE	M1			1						2
28C07	28C7 STROKE	M1			1						2
28C08	28C8 STROKE	M1			1						2
29	VEHICLE CRASHES										
29A01	29A1 VEHICLE CRASH	Ambulance Only								Yes	
29B01	29B1 VEHICLE CRASH W/ INJURIES	M2	1		1					Yes	5
29B02	29B2 VEH CRASH SUBJ BLEEDING	M2	1		1					Yes	5
29B03	29B3 VEHICLE CRASH W/ HAZARDS	M2	1		1					Yes	5
29B04	29B4 VEHICLE CRASH UNK STATUS	M2	1		1					Yes	5
29D01	29D1 VEH CRASH MAJOR INCIDENT	MT3	2	1	1	2	2	1		Yes	25
29D02	29D2 VEHICLE CRASH	M2	1		1					Yes	5
29D02K	29D2 ALL TERRAIN VEHICLE CRASH	M2	1		1					Yes	5
29D02L	29D2 MOTORCYCLE HIT BY VEHICLE	M2	1		1					Yes	5
29D02M	29D2 PEDESTRIAN STRUCK	M2	1		1					Yes	5
29D02N	29D2 SUBJ THROWN FROM VEHICLE	M2	1		1					Yes	5
29D02O	29D2 WATERCRAFT CRASH	R2	1		1		1			Yes	11
29D02P	29D2 VEHICLE ROLLOVER	R2	1		1		1			Yes	11
29D02Q	29D2 VEHICLE DOWN EMBANKMENT	R2	1		1		1			Yes	11
29D02R	29D2 VEH CRASH POSS FATALITY	R2	1		1		1			Yes	11
29D02S	29D2 SINKING VEHICLE	R2	1		1		1			Yes	11
29D03	29D3 VEHICLE CRASH WITH HAZMAT	R3	1		1		1	1		Yes	9
29D04	29D4 VEHICLE CRASH PIN IN	R2	1		1		1			Yes	11
29D05	29D5 VEH CRASH SUBJ NOT ALERT	M2	1		1					Yes	3
29D01	29D01 VEHICLE CRASH	M2	1		1					Yes	5
30	TRAUMATIC INJURIES										
30A01	30A1 INJURY NON RECENT	Ambulance Only									
30A02	30A2 INJURY	Ambulance Only									
30B01	30B1 POSSIBLE SEVERE INJURY	M1			1						2
30B02	30B2 INJURY W/ SERIOUS BLEEDING	M1			1						2
30D01	30D1 INJURY SUBJ UNRESPONSIVE	M2	1		1						5
30D02	30D2 INJURY SUBJECT NOT ALERT	M1			1						2
30D03	30D3 INJURY W/ DIFF BREATHING	M1			1						2



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BC's	HazMat	CFR	Police	Min # of Fire Personnel
31	UNCONSCIOUS / FAINTING										
31A01	31A1 SUBJ FAINTED NOW ALERT	Ambulance Only									
31A02	31A2 SUBJ FAINTED NOW ALERT	Ambulance Only									
31A03	31A3 SUBJ FAINTED NOW ALERT	Ambulance Only									
31C01	31C1 FAINTING DIFF BREATHING	M1			1						2
31C02	31C2 FAINTING SUBJ ALERT	M1			1						2
31C03	31C3 UNCONSCIOUS SUBJECT	M1			1						2
31D01	31D1 UNCONSCIOUS SUBJECT	M1			1						2
31D02	31D2 UNCONSCIOUS SUBJECT	M1			1						2
31D03	31D3 UNCONSCIOUS SUBJECT	M1			1						2
31D04	31D4 UNCONSCIOUS SUBJECT	M1			1						2
31E01	31E1 UNCONSCIOUS SUBJECT	M2	1		1						5
32	UNKNOWN MEDICAL PROBLEM										
32B01	32B1 UNKNOWN MEDICAL PROBLEM	Ambulance Only									
32B02	32B2 UNKNOWN MEDICAL ALARM	Ambulance Only									
32B03	32B3 UNKNOWN MEDICAL	Ambulance Only									
32B04	32B4 UNKNOWN MEDICAL	Ambulance Only									
32D01	32D1 LIFE STATUS QUESTIONABLE	M2	1		1						5
33	TRANSFER										
33A01	33A1 TRANSFER	Ambulance Only									
33A02	33A2 TRANSFER	Ambulance Only									
33A03	33A3 TRANSFER	Ambulance Only									
33C01	33C1 TRANSFER SUBJ NOT ALERT	M1			1						2
33C02	33C2 TRANSFER	M1			1						2
33C03	33C3 TRANSFER SUBJ BLEEDING	M1			1						2
33C04	33C4 TRANSFER	M1			1						2
33C05	33C5 TRANSFER SUBJ IN PAIN	M1			1						2
33C06	33C6 TRANSFER	M1			1						2
33D01	33D1 TRANSFER CARDIAC ARREST	M2	1		1						5
33D02	33D2 TRANSFER	M2	1		1						5



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
51	AIRCRAFT EMERGENCY										
51A01	51A1 AIRCRAFT STANDBY	MT1	1		1				1		7
51B01	51B1 AIRCRAFT UNKNOWN STATUS	MT1	1		1				1		7
51C01	51C1 AIRCRAFT MAJOR EMERGENCY	MT2	1			1	1		2		15
51C02	51C2 AIRCRAFT MINOR EMERGENCY	MT1	1		1				1		7
51D01	51D1 AIRCRAFT CRASH ON LAND	MT4	2	1	1	1	2	1	2	Yes	25
51D02	51D2 AIRCRAFT CRASH INTO BLDG	MT4	2	1	1	1	2	1	2	Yes	25
51D03	51D3 AIRCRAFT FIRE ON GROUND	MT4	2	1	1	1	2	1	2	Yes	25
51D04	51D4 AIRCRAFT IN COASTAL WATER	MT4	2	1	1	1	2	1	2	Yes	25
51D05	51D5 AIRCRAFT CRASH IN WATER	MT4	2	1	1	1	2	1	2	Yes	25
51D06	51D6 AIRCRAFT CRASH IN OCEAN	MT4	2	1	1	1	2	1	2	Yes	25
51001	51omega1 AIRBORNE AIRCRAFT	MT1	1		1				1		7
52	ALARMS										
52B01	52B1 RESIDENTIAL FIRE ALARM	F3	2	1							9
52B01C	52B1 CARBON MONOXIDE ALARM	HM1	1				1	1			9
52B02	52B2 FIRE ALARM NON DWELLING	F3	2	1							9
52B02C	52B2 CARBON MONOX DETECTOR	HM1	1								3
52B03	52B3 MOBILE HOME FIRE ALARM	F3	2	1							9
52B03C	52B3 CARBON MONOX DETECTOR	HM1	1								3
52B04	52B4 FIRE ALARM UNKNOWN STATUS	F3	2	1							9
52C01	52C1 HIGH RISK BLDG FIRE ALARM	F5	3	1	1		1				15
52C01C	52C1 CARBON MONOX DETECTOR	HM1	1								3
52C01I	52C1 INDUSTRIAL GAS DETECTOR	HM2	1				1	1			9
52C02	52C2 HIGH RISE BLDG FIRE ALARM	F5	3	1	1		1				15
52C02C	52C2 CARBON MONOX DETECTOR	HM1	1								3
52C02I	52C2 INDUSTRIAL GAS DETECTOR	HM2	1				1	1			9
52C03	52C3 COMMERCIAL FIRE ALARM	F4	2	1							10
52C03C	52C3 CARBON MONOX DETECTOR	HM1	1				1				3
52C03I	52C3 INDUSTRIAL GAS DETECTOR	HM2	1				1	1			9
52C04	52C4 APART COMPLEX FIRE ALARM	F5	3	1	1		1				15
52C04C	52C4 CARBON MONOX DETECTOR	HM1	1								3
52C04I	52C4 INDUSTRIAL GAS DETECTOR	HM2	1				1	1			9
52001	52omega1 MISC ALARM	F1	1								3
52002	52omega2 MEDICAL ALARM	M1			1						2



Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
53	CITIZEN ASSIST /SERVICE CALLS										
53A01	53A1 LOCK IN OR LOCK OUT	F1	1								3
53A02	53A2 CITIZEN ASSIST	F1	1								3
53A03	53A3 ANIMAL RESCUE	F1	1								3
53A04	53A4 WATER PROBLEM	F1	1								3
53A05	53A5 SERVICE CALL	F1	1								3
53A06	53A6 UNK TYPE SERVICE CALL	F1	1								3
53B01	53B1 VEHICLE LOCK IN	F1	1								3
53B02	53B2 LOCK IN OR OUT OF BUILDG	F1	1								3
53B03	53B3 POSSIBLE MEDICAL ASSIST	F1	1								3
53B04	53B4 POSSIBLE MEDICAL ASSIST	F1	1								3
53B05	53B5 UNKNOWN POSSIBLE MEDICAL	F1	1								3
53C01	53C1 WATER W/ ELECTRIC HAZARD	F1	1								3
53C02	53C2 MULTI UNIT SERVICE CALL	M2	1	1							5
53001	53omega1 COMPLAINT	F1	1								3
53002	53omega2 COMPLAINT	F1	1								3
53003	53omega3 COMPLAINT	F1	1								3
53004	53omega4 COMPLAINT	F1	1								3
53005	53omega5 COMPLAINT	F1	1								3
53006	53omega6 COMPLAINT	F1	1								3
54	CONFINED SPACE / STRUCTURAL COLLAPSE										
54B01	54B1 ENTRAPMENT UNCONFIRMED	R1	1								3
54C01	54C1 ENTRAP WITH HAZMAT UNCONF	R3	1	1			1	1			16
54D01	54D1 CONFIRMED ENTRAPMENT	R2	1			1	1				11
54D02	54D2 ENTRAPMENT WITH HAZMAT	R3	1	1			1	1			16



Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
55	ELECTRICAL HAZARD										
55A01	55A1 OUTSIDE ELECTRICAL HAZARD	F1	1								3
55A02	55A2 APPLIANCE PROBLEM	F1	1								3
55B01	55B1 ELECTRICAL ARCING	F1	1								3
55B02	55B2 WIRES DOWN	F1	1								3
55B03	55B3 APPLIANCE PROBLEM	F1	1								3
55B04	55B4 ELECTRICAL ODOR	F1	1								3
55B05	55B5 UNKNOWN ELECTRICAL ISSUE	F1	1								3
55C01	55C1 ELECTRIC HAZARD AND WATER	F1	1								3
55C02	55C2 LIVE WIRES DOWN	F1	1								3
56	ELEVATOR / ESCALATOR RESCUE										
56A01	56A1 SUBJECT STUCK IN ELEVATOR	M2	1		1						
56B01	56B1 SUBJECT STUCK IN ELEVATOR	M2	1		1						5
56B02	56B2 ESCALATOR ENTRAPMENT	M2	1		1						5
56B03	56B3 UNKNOWN ELEVATOR PROBLEM	M2	1		1						5
56D01	56D1 ELEVATOR ENTRAPMENT	R2	1			1	1				11
56D02	56D2 ELEVATOR ACCIDENT	R2	1			1	1				11
56O01	56omega1 ELEVATOR MALFUNCTION	R1	1								3
56O02	56omega2 ESCALATOR MALFUNCTION	R1	1								3
57	EXPLOSION										
57B01	57B1 VEHICLE EXPLOSION	F2	2		1		1				9
57B02	57B2 EXPLOSION	F2	2		1		1				9
57B03	57B3 EXPLOSION UNK SITUATION	F2	2		1		1				9
57D01	57D1 EXPLOSION HIGH LIFE HAZ	F6	4	2	2		2				24
57D02	57D2 EXPLOSION HIGH RISE BLDG	F6	4	2	2		2				24
57D03	57D3 EXPLOSION COMMERCIAL BLDG	F5	3	1	1		1				15
57D04	57D4 EXPLOSION APART COMPLEX	F6	4	2	2		2				24
57D05	57D5 RESIDENTIAL EXPLOSION	F5	3	1	1		1				15
57D06	57D6 EXPLOSION OF NON DWELLING	F2	2		1		1				9
57D07	57D7 EXPLOSION OF NON DWELLING	F2	2		1		1				9
57D08	57D8 LARGE VEHICLE EXPLOSION	F2	2		1		1				9
57D09	57D9 MOBILE UNIT EXPLOSION	F2	2		1		1				9
57D10	57D10 MOBILE STRUCT EXPLOSION	F2	2		1		1				9



Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
58	EXTRICATION (VEHICLE / MACHINERY)										
58B01	58B1 EXTRICATION	M2	1		1						5
58B02	58B2 ENTRAPMENT UNKNOWN STATUS	M2	1		1						5
58D01	58D1 EXTRICATION	R2	1		1		1				11
58O01	58Omega1 NO LONGER TRAPPED	R1	1								3
59	FUEL SPILL										
59B01	59B1 SMALL SPILL UNCONTAINED	HM1	1								3
59B02	59B2 SMALL SPILL CONTAINED	HM1	1								3
59C01	59C1 SPILL NEAR WATER	HM2	1				1	1			9
59C02	59C2 LARGE SPILL UNCONTAINED	HM2	1				1	1			9
59C03	59C3 LARGE SPILL CONTAINED	HM2	1				1	1			9
59C04	59C4 SPILL SITUATION UNKNOWN	HM2	1				1	1			9
60	GAS LEAK / GAS ODOR										
60B01	60B1 OUTSIDE GAS LEAK	HM2	1				1	1			9
60B02	60B2 GAS ODOR SOURCE UNKNOWN	HM1	1								3
60C01	60C1 RESIDENTIAL GAS LEAK	HM2	1				1	1			9
60C02	60C2 COMMERCIAL GAS LEAK OUTSIDE	HM3	2		1		1	2		Yes	19
60D01	60D1 GAS LEAK HIGH LIFE HAZARD	HM3	2		1		1	2		Yes	19
60D02	60D2 GAS LEAK IN HIGH RISE	HM3	2		1		1	2		Yes	19
60D03	60D3 GAS LEAK COMMERCIAL BLDG	HM3	2		1		1	2		Yes	19
60D04	60D4 GAS LEAK AT APARTMENTS	HM3	2		1		1	2		Yes	19
61	HAZMAT										
61A01	61A1 ABANDONED WASTE	HM1	1							Yes	3
61B01	61B1 HAZMAT SPILL	HM1	1								3
61C01	61C1 HAZMAT CONTAINED	HM2	1				1	1			9
61C02	61C2 DRUG LAB CONTAINED	HM2	1				1	1		Yes	9
61D01	61D1 HAZMAT UNCONTAINED	HM3	2		1		1	2			19
61D02	61D2 DRUG LAB UNCONTAINED	HM3	2		1		1	2		Yes	19



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
62	HIGH / LOW ANGLE RESCUE										
62B01	62B1 HIGH ANGLE UKN SITUATION	R2	1		1	1	1				11
62D01	62D1 HIGH ANGLE RESCUE	R4	1	1	1	2	1	1			24
62D02	62D2 HIGH ANGLE RESCUE	R4	1	1	1	2	1	1		Yes	24
63	LIGHTNING STRIKE										
63B01	63B1 HOUSE HIT BY LIGHTNING	F3	2	1							9
63B02	63B2 LIGHTNING HIT OUTBUILDING	F3	2	1							9
63B03	63B3 LIGHTNING HIT OUTBUILDING	F3	2	1							9
63B04	63B4 LIGHTNING HIT MOBILE HOME	F3	2	1							9
63B05	63B5 OUTSIDE LIGHTNING STRIKE	F3	2	1							9
63B06	63B6 UNKNOWN LIGHTNING STRIKE	F3	2	1							9
63C01	63C1 LIGHTNING HIT BUILDING	F5	3	1	1		1				15
63C02	63C2 LIGHTNING HIT BUILDING	F5	3	1	1		1				15
63C03	63C3 LIGHTNING HIT BUILDING	F5	3	1	1		1				15
63C04	63C4 LIGHTNING HIT APARTMENTS	F5	3	1	1		1				15
Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
64	MARINE FIRE										
64B01	64B1 WATERCRAFT FIRE OUT	F1	1								3
64D01	64D1 BOAT FIRE THREATENING BLDG	F2	2		1		1				9
64D02	64D2 DOCKED BOAT ON FIRE	F1	1								3
64D03	64D3 DOCKED BOAT ON FIRE	F2	2		1		1				9
64D04	64D4 BEACHED BOAT ON FIRE	F1	1								3
64D05	64D5 BEACHED BOAT ON FIRE	F2	2		1		1				9
64D06	64D6 BOAT FIRE IN OPEN WATER	F1	1								3
64D07	64D7 BOAT FIRE IN OPEN WATER	F1	1								3
64D08	64D8 BOAT FIRE IN OPEN WATER	F1	1								3
64D09	64D9 BOAT FIRE IN DRYDOCK	F1	1								3
65	MUTUAL AID / ASSIST OTHER AGENCY										
65A01	65A1 MUTUAL AID MULTIPLE UNITS	F1	1								3
65A02	65A2 ASSIST OTHER AGENCY	F1	1								3
65A03	65A3 MUTUAL AID SINGLE UNIT	F1	1								3
65A04	65A4 ASSIST OTHER AGENCY	F1	1								3
65A05	65A5 MUTUAL AID MOVE UP	F1	1								3
65A06	65A6 MUTUAL AID TO STAGING	F1	1								3
65B01	65B1 MUTUAL AID SINGLE UNIT	F1	1								3
65B02	65B2 ASSIST OTHER AGENCY	F1	1								3
65D01	65D1 MUTUAL AID	F1	1								3
65D02	65D2 ASSIST OUTSIDE AGENCY	F1	1								3
66	ODOR										
66A01	66A1 ODOR INSIDE	F1	1								3
66A02	66A2 ODOR OUTSIDE	F1	1								3
66C01	66C1 ODOR INSIDE WITH PATIENTS	M2	1		1						5
66C02	66C2 ODOR OUTSIDE WITH PATIENTS	M2	1		1						5



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
67	OUTSIDE FIRE										
67A01	67A1 TRANSFORMER WIRE OR POLE	F1	1								3
67A02	67A2 CHECK EXTINGUISHED FIRE	F1	1								3
67B01	67B1 SMALL OUTSIDE FIRE	F1	1								3
67B02	67B2 OUTSIDE FIRE WITH HAZMAT	HM2	1				1	1			9
67B03	67B3 OUTSIDE FIRE UNKNOWN	F1	1								3
67D01	67D1 WILDLAND FIRE	F1	1								3
67D02	67D2 LARGE BRUSH FIRE	F2	2		1		1				9
67D03	67D3 LARGE OUTSIDE FIRE	F2	2		1		1				9
67D04	67D4 OUTSIDE FIRE WITH HAZMAT	HM2	1				1	1			9
67D05	67D5 TANK FARM FIRE	F6	4	2	2		2			Yes	24
67E01	67E1 PERSON ON FIRE OUTSIDE	M2	1		1					Yes	5
67001	67omega1 CONTROLLED BURN	F1	1								3
68	SMOKE INVESTIGATION										
68A01	68A1 LIGHT SMOKE OUTSIDE	F1	1								3
68A02	68A2 ODOR OF SMOKE OUTSIDE	F1	1								3
68C01	68C1 HEAVY SMOKE OUTSIDE	F1	1								3
69	STRUCTURE FIRE										
69C01	69C1 APPLIANCE FIRE	F5	3	1	1		1				15
69C02	69C2 STRUCT FIRE EXTINGUISHED	F5	3	1	1		1				15
69D01	69D1 STRUCT FIRE HIGH LIFE RISK	F6	4	2	2		2				24
69D02	69D2 HIGH RISE STRUCTURE FIRE	F6	4	2	2		2				24
69D03	69D3 COMMERCIAL STRUCT FIRE	F5	3	1	1		1				15
69D04	69D4 COMMIER FIRE WITH HAZMAT	F5	3	1	1		1				15
69D05	69D5 APARTMENT FIRE	F6	4	2	2		2				24
69D06	69D6 RESIDENTIAL STRUCT FIRE	F5	3	1	1		1				15
69D07	69D7 CHIMNEY FIRE	F5	3	1	1		1				15
69D08	69D8 LARGE NON DWELLING FIRE	F5	3	1	1		1				15
69D09	69D9 SMALL NON DWELLING FIRE	F5	3	1	1		1				15
69D10	69D10 MOBILE HOME FIRE	F5	3	1	1		1				15
69D11	69D11 UNKNOWN TYPE STRUCT FIRE	F5	3	1	1		1				15
69E01	69E1 PERSON ON FIRE IN STRUCT	F5	3	1	1		1				15



Fayetteville Fire/Emergency Management

Standard of Coverage

Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BCs	HazMat	CFR	Police	Min # of Fire Personnel
70	TRAIN AND RAIL COLLISION										
70C01	70C1 TANKER TRUCK ON TRACKS	F2	2		1		1				9
70C02	70C2 COMMERCIAL VEHICLE ON TRACKS	F2	2		1		1				9
70C03	70C3 VEHICLE ON TRACKS	M2	1		1						5
70C04	70C4 TRAIN UNKNOWN SITUATION	M2	1		1						5
70D01	70D1 SUBJECT TRAPPED BY TRAIN	R2	1		1	1	1				11
70D02	70D2 DERAILMENT INVOL BLDGS	MT4	2	1	1	2	2	1		Yes	25
70D03	70D3 DERAILMENT INVOL VEHICLES	MT4	2	1	1	2	2	1		Yes	25
70D04	70D4 DERAILMENT UNDERGROUND	MT4	2	1	1	2	2	1		Yes	25
70D05	70D5 DERAILMENT ABOVE GRADE	MT4	2	1	1	2	2	1		Yes	25
70D06	70D6 TRAIN DERAILMENT	MT4	2	1	1	2	2	1		Yes	25
70D07	70D7 DERAILMENT IN TUNNEL	MT4	2	1	1	2	2	1		Yes	25
70D08	70D8 DERAILMENT ON BRIDGE	MT4	2	1	1	2	2	1		Yes	25
71	VEHICLE FIRE										
71A01	71A1 VEHICLE FIRE OUT	F1	1								3
71B01	71B1 VEHICLE FIRE	F1	1								3
71B02	71B2 LARGE VEHICLE FIRE OUT	F1	1								3
71C01	71C1 VEHICLE FIRE	F1	1								3
71C02	71C2 VEH FIRE IN PARKING DECK	F2	2				1				9
71D01	71D1 VEH FIRE SUBJECT TRAPPED	R2	1			1	1				11
71D02	71D2 VEHICLE FIRE IN TUNNEL	F2	2				1				9
71D03	71D3 VEH FIRE THREATEN STRUCTURE	F2	2				1				9
71D04	71D4 COMMERCIAL VEHICLE FIRE	F2	2				1				9
71D05	71D5 LARGE VEHICLE FIRE	F2	2				1				9
72	WATER RESCUE										
72A01	72A1 ANIMAL RESCUE	M2	1								5
72A02	72A2 BODY RECOVERY	M2	1								5
72B01	72B1 STRANDED MOTORIST	M2	1								5
72B02	72B2 UNKNOWN SITUATION	M2	1								5
72D01	72D1 ICE RESCUE	R2	1			1	1				11
72D02	72D2 SWIFT WATER RESCUE	R2	1			1	1				11
72D03	72D3 SCUBA ACCIDENT	R2	1			1	1				11
72D04	72D4 POOL RESCUE	M2	1								5
72D05	72D5 WATER RESCUE	M2	1								5
72D06	72D6 WATER RESCUE	M2	1								5
72D07	72D7 WATER RESCUE	M2	1								5
72D08	72D8 FLOOD WATER RESCUE	R2	1			1	1				11
72D09	72D9 FLOOD WATER RESCUE	R2	1			1	1				11
72D10	72D10 QUICKSAND MUD RESCUE	R2	1			1	1				11
72E01	72E1 SINKING VEHICLE	R2	1			1	1			Yes	11



Nature	Description	Response Category	Engines	Trucks	Squads	Rescues	BC's	HazMat	CFR	Police	Min # of Fire Personnel
73	WATERCRAFT IN DISTRESS										
73B01	73B1 WATERCRAFT OUT OF FUEL	M2	1								5
73B02	73B2 WATERCRAFT ENGINE TROUBLE	M2	1								5
73B03	73B3 WATERCRAFT RUN AGROUND	M2	1								5
73B04	73B4 WATERCRAFT FLARE SIGHTING	M2	1								5
73D01	73D1 WATERCRAFT IN DISTRESS	M2	1								5
73D02	73D2 DISTRESS FLARE SIGHTING	M2	1								5
73D03	73D1 WATERCRAFT UNKNOWN STATUS	M2	1								5
74	SUSPICIOUS PACKAGE / BOMB THREAT										
74A01	74A1 EXPLOSIVES FOUND	F1	1							First	3
74B01	74B1 BOMB THREAT	F1	1							First	3
74C01	74C1 SUSPICIOUS PACKAGE	F1	1							First	3
74C02	74C2 SUSPICIOUS PACKAGE	F1	1							First	3
74C03	74C3 BOMB THREAT	F1	1							First	3
74D01	74D1 SUSPICIOUS PACKAGE	F1	1							First	3
74D02	74D2 SUSPICIOUS PACKAGE	F1	1							First	3
74D03	74D3 EXPLOSIVE FOUND	F1	1							First	3
75	TRAIN FIRE										
75C01	75C1 TRAIN FIRE KNOWN STATUS	F5	3	1			1				15
75D01	75D1 TRAIN FIRE AND BUILDINGS	F5	3	1			1				15
75D02	75D2 TRAIN FIRE WITH VEHICLES	F5	3	1			1				15
75D03	75D3 TRAIN FIRE BELOW GROUND	F5	3	1			1				15
75D04	75D4 TRAIN FIRE ABOVE GROUND	F5	3	1			1				15
75D05	75D5 TRAIN FIRE	F5	3	1			1				15
75D06	75D6 TRAIN FIRE	F5	3	1			1				15
75D07	75D7 TRAIN FIRE ON BRIDGE	F5	3	1			1				15
75O01	75omega1 MOVING TRAIN	F5	1								3



Component G: Compliance Methodology

Fayetteville Fire/Emergency Management Department (FFD) recognized a weakness in 2004 in the purview of records management. This was exacerbated by an impending classification inspection the same year from the Insurance Service Office (ISO). A temporary Research and Planning Officer's position was created that has quickly grown into a full time Planning and Research Division staffed by a permanent Battalion Commander who serves as the Accreditation Manager, a permanent Captain who is classified as the Planning and Research Officer and two (2) Lieutenant positions that have been continually filled on a temporary basis by personnel reassigned from the Operations Branch. The growth of this division has been sparked by the new practices implemented as a direct result of the accreditation process. This division is responsible for all aspects of records management and data analysis. Along with the growth in personnel, the division has recently grown exponentially in technology and analytical capabilities.

Service level and response objectives have been established as previously described in this document. To ensure FFD is meeting adopted service level objectives, continuous monitoring of service level baselines must be conducted on a regular basis. Custom reports have been built in FireHouse RMS and Crystal Reports software. The department has also implemented a Fire Analysis Tool package from Bradshaw Consulting. This is a GIS based program which will be fully functional in the Spring of 2011.

The City of Fayetteville purchased a new Computer Aided Dispatch System (CAD) in 2010. The CAD is interfaced with FireHouse RMS. Incident data is automatically extrapolated from FireHouse RMS nightly and imported into the fire analysis tools. This allows for continuous monitoring of performance objective compliance. The Planning and Research Officer publishes numerous monthly and annual reports that illustrate SOC compliance, concentration and distribution performance, effective response force



compliance, service demand by district, property loss/save ratio, and other incident driven data.

The Planning and Research staff reviews these reports monthly and highlight any deficiencies noted. The Command Staff reviews these reports during the quarterly and annual planning meetings. The department has not possessed these capabilities long enough to determine the level of effectiveness provided, but response plans and resource allocations have been adjusted based on trends that have been readily apparent in this short time. A thorough review will be conducted annually to ensure resource placement matches identified risk. The results of this review will be published in the annual report which is submitted to the City Manager and elected City Council.

The department will continue analyzing incident data on a fractal level and adjust operations to increase efficiency where applicable.

In addition to incident data, the Planning and Research Division is responsible for tracking policy compliance with hydrant maintenance, pre-incident surveys, occupancy risk assessments, equipment inventories and community involvement projects. Reports are generated monthly to ensure all prescribed activities have been completed. It is the responsibility of Battalion Commanders assigned to the Operations Branch to review these reports and ensure their subordinates have met the performance expectations.

Another area of performance compliance falls under the responsibility of the Training Division. The Training Division is staffed by a permanent Captain and two permanent Lieutenants. This division is overseen by the Accreditation Manager. The Training Division is responsible for maintaining all training records to include benchmarking drills designed to evaluate the validity of critical task which facilitates an on-going critical task analysis. These drills are derived from NFPA standards and were recently incorporated into monthly fire evolutions.



The department plans to continually send staff to basic workshop training provided by CPSE, Peer Assessor continuing education and dayroom discussions to keep abreast of future changes in compliance. The department is also a member of the North Carolina Accreditation Consortium which meets quarterly to discuss topics related to the accreditation process.



Component H: Overall Evaluation, Conclusions, and Recommendations

This section is designed to evaluate the service delivery in consideration of the pre-identified risks, resource allocation and adopted service level objectives. The process of conducting formal reviews of the service area and establishing differential response plans is one that is fairly new to the organization. Also, annual appraisals of each service provided is a task now completed in uncharted waters. The department now has the ability to capture and analyze all realms of incident data. It also possesses the analytical tools needed to measure performance at all levels in fractal format. The department can now easily see where goals and objectives have been satisfied, as well as, areas that need improvement. An important component is that progress can be effectively measured and planning tools are in place for continual enhancement of services.

Evaluation Methodology

The Planning and Research Division is responsible for capturing and analyzing incident data. They also manage a quality control process to ensure the data remains valid. The results of numerous reports are distributed monthly to the Command Staff. Trends are noted and discrepancies addressed. This information is reviewed at quarterly planning meetings. Minor adjustments are made as needed by the Operations Branch Chief. Significant changes are incorporated into the Strategic and Capital Planning Processes.

Data Review

This Accreditation process has facilitated many improvements within the organization. This statement applies to both capabilities and processes. A thorough review of the past 5 years of historical data was performed. Utilizing this information, service level objectives determining the 90th percentile for distribution and concentration for total response times have been established. Historically, the department did not operate a differential response based on associated risk. This began in July 2010. It was difficult to establish tiered



service levels with the change in response plans. To compound this issue, is the fact that the department did not document call processing times until implementation of a new CAD system in 2010.

Conclusions

The development of the SOC document has forced the department to plainly see its capabilities, as well as its challenges. The Fayetteville Fire/Emergency Management Department is satisfied that it can consistently meet adopted service level objectives, but there are areas for improvement that will narrow the gap between baselines and benchmarks.

Recommendations for Improvement:

1. Relocate Truck 3 to Station 7
2. Relocate Squad 7 to Station 3
3. Add Squad 9 to Station 9
4. Decentralize Hazmat team and assign two response forces
5. Relocate Station 4 further out Bragg Blvd.
6. Add Fire Station 16 to the Cedar Creek Rd. area.
7. Add Station 21 to Morganton Rd. and Reilly Rd. area.
8. Add Station 18 to Centry Cr. area.
9. Add Station 20 to River Rd. area.
10. Promote consolidation of Dispatch Centers to improve call processing times.
11. Fully implement MCT's to capture real time incident data.
12. Utilize 2010 census data to analyze demographic data.



Component I: Appendices, Exhibits, and Attachments

